

#### STIC Search Report Biotech-Chem Library

#### STIC Database Tracking Number: 151497

TO: Sumesh Kaushal

Location: REM-2B85/2C70

Art Unit: 1636

Wednesday, April 27, 2005

Case Serial Number: 10/735014

From: Barb O'Bryen

**Location: Biotech-Chem Library** 

Remsen 1a69

Phone: 571-272-2518

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barbara.obryen@uspto.gov

#### Search Notes



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Abue11316 h
Abue1712 h
Abue8651 h
Ada38026 h
Ada21712 h
Ada1049 h
Ada18043 h
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Human, PRO protein, tumour necrosis factor family, TNF; cytokine, secreted protein, transmembrane protein, inflammation disorder.
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97US-0069334P.
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97US-0069425P.
97US-0069694P.
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(GETH ) GENENTECH INC
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Chen J;

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Baker

Result No.

Homo sapiens.

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The present invention describes nucleic acids encoding PRO secreted and transmembrane proteins used therapeutically. The PRO proteins have activated, anti-inflammatory, anti-prolliferative and immunosuppressive activity. The proteins and polynucleotides can be used in therapy, identification of homologues, raising antibodies and design of probes and primers. They can be used in a range of diseases related to proteins that they have homology with, e.g. a PRO protein having homology to complement proteins may be used in inflammatory responses
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The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic colerosis, idiopathic inflammatory myopathies, Sjogren's systemic solectis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating diseases of the central and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus.
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DL, Smith V;
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Pan J, Pennica D, Shelton DL,
Watanabe CK, Wood WI, Yan M;
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99US-0131445P.
99US-0132371P.
99US-0134287P.
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Lu Y, Pan
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Ta. Tumas D,
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Kabakoff RC,
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peripheral nervous systems, hepatobiliary diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease. AACS8397 to AACS878 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AACS8579 to AACS8679 to AACS8679 and AABS33414 to AAB33477 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention
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ive 0; Mismatches 0;
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/label= Signal peptide
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Matches 431, Conservative
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/note=
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16, Goddard A, Godowski PJ, Grimaldi CJ, Gurney
Kljavin IJ, Napier MA, Roy MA, Tumas D, Wood W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 431;
"Tyrosine kinase phosphorylation site"
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100.0%; Pred. No. 4.9e-173;
ive 0; Mismatches 0;
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/note= "cAMP- and cGMP-dependent
phosphorylation site"
                                                   "N-glycosylation site"
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384. .405
/label= Transmembrane domain
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                                                                             222. .226
/note= "N-glycosylation
251. .255
/note= "N-glycosylation
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98US-0112850P.
98US-0113296P.
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Hillan KJ, Kljavin IJ,
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RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       represent the proteins and their encoding nucleotide sequences, and sequences AAB34746-B34771 represent fragments of the proteins. Probes for the DNA sequences are represented by sequences AAC59847-C59596. The proteins exhibit neuroprotective, defractogical, immunosuppressive, antiinflammatory, antianaemic, nootropic, antiparkinsonian, cerebroprotective, haemostatic, vulnerary, cytostatic, antipsoriatic,
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                                                                                                                                        EASPGSSSOGSVPENOYGLPPEKWLLIGGLLFGVLFLVIGGVLLGRILSESLRRKRYSRL 420
                                                                                                                                                                                                                                                                                                                                              Secreted protein, human, autoimmune disorder, multiple sclerosis, ulcer, systemic lupus erythematosus; rheumatoid arthritis, anaemia; stroke; maematopoissis regulation; tissue regrowth; wound healing; haemophilia; Alzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer; contraceptive; infection; growth inhibition; hyperproliferative disorder;
                                                                                                   AVLITIFQAPIDSKGSLETIPFIEISNLTLNTGNVYNPTALSMSNVESSIWNKTASWEGR 360
                                                                                                                            EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention relates to 59 human secreted proteins and the nucleotide sequences encoding them. Sequences AAC59788-C59846 and AAB34687-B34745
AVLTTTFQAPTDSKGSLET1PFTE1SNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
                                   TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
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sclerosis, systemic lupus erythmatosus, rheumatoid arthritis, cancer
Alzheimer's disease, Parkinson's disease, stroke, anemia and ulcers.
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                                                                                                                                                                                                                                                                                                                        Human secreted protein encoded by DNA clone vo27 1.
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99US-0124916P.
99US-0149639P.
99US-0157247P.
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17-AUG-1999;
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ancipacterial, virtuicae, and tungicae activity: the proteins and nucleotide sequences are useful an untritional sources or supphements and in research. The proteins are useful for treating immune deficiency and clisorders, which may be genetic or resulting from infections, autoimmune deficiency and disorders which may be genetic or resulting from infections, autoimmune deficiencies such as anaemias by regulating hematopolesis. The proteins of deficiencies such as anaemias by regulating hematopolesis. The proteins are also useful in compositions for bone, cartilage, tendon, ligament and volbacement and in the treatment of wounds, incisions and culcers. Other uses include in the treatment of wounds, incisions and culcers. Other uses include in the treatment of central and peripheral nervous system and neuropathies such as Alzheimer's and Parkinson's culcers. Other uses include in the treatment of central and peripheral nervous system and neuropathies such as Alzheimer's and Parkinson's such as spinal cord disorders, head trauma and stroke. The proteins may also be used as a contraceptive, and for treating coagulation disorders can be as meamophilas. The protein and nucleotide sequences with cadherin activity are useful for treating commer. Other uses for the protein culcude for inhibiting the growth, infection or function of, or killing, infecting bodily characteristics such as height, weight, hair colour, effecting biorhythms or cardiac cycles or rhythms, effecting metabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors, effecting behavioural characteristics providing analgesic effects and ceffecting behavioural characteristics providing analgesic effects and ceffecting behavioural characteristics providing analgesic effects and ceffects and ceffecting behavioural characteristics providing analgesic effects and ceffecting behavioural characteristics providing analgesic effects and ceffecting behavioural characteristics co
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; Pred. No. 4.9e-173;
0; Mismatches 0; Indels 0.
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Best Local Similarity 100.
Matches 431, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 431 AA;
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AVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR 360
                                                                                                                                                                                                                                                                                             DL;
Godowski PJ;
Paoni NF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transmembrane protein; PRO; cytostatic; cell death; mapping; gene mapping; tissue typing;
                                HLBKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA
                                                                                                                241 TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
                                                                                                                                                                                                                   AVLITITEQAPIDSKGSLETIPFIEISNLTLNTGNVYNPIALSMSNVESSIMNKTASWEGR
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  HLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA
                                                                                       TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTL1STVFTRAAATLQAMATT
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Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A,
Grimaldi CJ, Gurney AL, Kljavin IJ, Napier MA, Pan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PRO361 protein sequence SEQ ID NO:515.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB65299 standard; protein; 431 AA.
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99US-0145698P.
99US-0146222P.
99US-0149396P.
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99WO-US021547.
99US-0158663P.
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99WO-US028301.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                        DYLINGIYVDI 431
                                                                                                                                                                                                                                                                                                                                                                                                  431
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                                                                                                                                                                                                                                                                                                                                                                                  DYLINGIYVDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; secreted and cancer; chromosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnostic assay.
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18-FEB-2000;
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20-DEC-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes primer sets for synthesising 5602 full-
length cDNAs defined in the specification, Where a primer set comprises:

(a) an oligo-dr primer and an oligonucleotide comprisentary to the complementary strand of a polynucleotide ocomprises one of the 5602 nucleotide sequences defined in the specification, where the oligonucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'-end sequence, where the comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in specification. The primers sets can be used in antisense therapy and in gene therapy. The primers set useful for synthesising polynucleotides, cherically in thouse and of the abnormality of the proteins encoded by the full-length cDNAs. The primers are also useful for the full-length cDNAs. The primers allow obtaining of the full-length cDNAs assily without any specialised methods. AAH13629 to AAH13628 and AAH13633 to AAH13632 represent human amino acid sequences; and AAH13629 to AAH13632 represent consideration of the considerati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
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                                       primer; detection; diagnosis; antisense therapy; gene therapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Yamamoto J;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 2211; DB 4; Length 431; 100.0%; Pred. No. 4.9e-173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 8; SEQ ID NO 17950; 2537pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           ogai T, Nishikawa T, Hayashi K, Sa
Sugiyama T, Wakamatsu A, Nagai K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
Human protein sequence SEQ ID NO:17950.
                                                                                                                                                                                                                                                          99JP-00248036.
99JP-00300253.
2000JP-00118776.
2000JP-00183767.
                                                                                                                                                                                                                   28-JUL-2000; 2000EP-00116126.
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Matches 431; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Isogai T,
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02-MAY-2000;
09-JUN-2000;
                                                                                                                              EP1074617-A2.
                                                                                     Homo sapiens
                                                                                                                                                                                                                                                               29-JUL-1999;
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The present invention describes human secreted and transmembrane PRO proteins. The PRO proteins have cytostatic activity. The PRO proteins can be used for targeted delivery of bloactive molecules, such as toxins, radiolabels or antibodies, that cause cell death. PRO mucleotide sequences, and their fragments, can be used as hybridisation probes, in chromosomal and gene mapping, and in the generation of anti-sense RNA and DNA. They may also be used to produce transgenic animals which are used to develop and screen therapeutically useful reagents. The PRO nucleotide and protein sequence can be used for tissue typing and in treating cancer. Anti-PRO antibodies can be used in diagnostic assays. AAF44270 to AAF44470 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAF444087 to AAF44289 and AAB65154 to AAB65100 represent human PRO polymucleotide and protein sequences given
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                                                                                                                         PRO polynucleotides used to produce polypeptides used to target bioactive molecules such as toxins, radiolabels or antibodies, to specific cells, to cause targeted cell death.
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        Watanabe CK, Williams PM, Wood WI;
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100.0%; Pred. No. 4.9e-173;
ive 0; Mismatches 0;
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        Tumas D,
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Best Local Similarity 100.
Matches 431, Conservative
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          Stewart TA,
                                                              WPI; 2001-032160/04
                                                                                       N-PSDB; AAF44268
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        Roy MA,
Zhang
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Human, PRO; secreted protein; transmembrane protein; anti-HIV; cytostatic; antiatidiabetic; cardiant; AIDS; acquired immunodeficiency syndrome; cancer; atherosclerosis; inflammatory disease; diabetic complication;
                                                                                                                                                                                                                                                                                                  Eaton DL, Ferrara N, Filvaroff E;
A, Godowski PJ, Grimaldi JC, Gurney AL;
Napier MA, Roy MA, Tumas D, Wood WI;
      Human secreted/transmembrane protein PRO361
                                                       cardiac injury; organ failure
                                                                                                                                                                                                                     2000WO-US005841.
2000WO-US008439.
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2000WO-US032678.
2001WO-US006520.
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99WO-US028409
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                                                                                                                     31-AUG-2001; 2001US-00944654
                                                                                                                                                                                                                                                                                                            Gerritsen ME, Goddard A,
Hillan KJ, Kljavin IJ, N
                                                                                                                                                                                                                                                                                                    Baker KP, Botstein D,
                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                      US2002142959-A1
                                                                       Homo sapiens.
                                                                                                                                                                                                                                            28-JUL-2000;
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28-FEB-2001;
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16-DEC-1999;
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                                                                                                                                                     22-JUN-1999
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New isolated PRO polypeptide and encoding nucleic acid, useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS, cancer, atherosclerosis, inflammatory disease and diabetes.

2003-174141/17. WPI; 2003-174141/: N-PSDB; ABX75504. Claim 12; Fig 32; 178pp; English

The invention relates to an isolated PRO polypeptide (a secreted or transmembrane protein) comprising: (a) at least 80% sequence identity or constitutes when compared to any of 15 sequences; fully defined in the specification, lacking or with its associated signal peptide; or (b) at least 80% sequence of a DNA deposited in the American Type Culture coding sequence of a DNA deposited in the American Type Culture as a Rob protein; (b) at least 80% sequence identity to a nuclectide sequence contains a Rob protein; (b) at least 80% sequence identity to a nuclectide sequence or full-length coding sequence identity to a nuclectide sequence or full-length coding sequence identity to a nuclectide sequence or full-length coding sequence identity to a nuclectide sequence or full-length coding sequence of a coding sequence of a nuclectide sequence or full-length coding sequence of a coding sequence or full-length coding sequence of a coding sequence of a nuclectide sequence or full-length to a full-length coding sequence of a vector comprising the nucleic acid; (3) a host coding sequence of the PRO polypeptide, produces the PRO protein; (4) a coding sequence; and (5) an anti-PRO antibody. The methods and conditions suitable conditions and coding sequence; and (5) an anti-PRO antibody. The methods and compositions of the present invention are useful for the diagnosis and treatment of disorders associated with the PRO polypeptide, such as AIDS (acquired immunodeficiency syndrome), cancer, atherosclerosis, inflammatory disorders of an anti-PRO antipoptide, such as AIDS (acquired immunodeficiency syndrome), and cancer, atherosclerosis, and required immunodeficiency syndrome), and cardiac injury and organ failure. The

(first entry)

26-MAR-2003 ABU55934;

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98US-0084600P-
98US-008760PP-
98US-008760PP-
98US-0087759P-
98US-0088021P-
98US-0089028P-
98US-0099028P-
98US-009028P-
98US-0090028P-
98US-009008P-
98US-0090028P-
98US-009
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28 - MAY - 1998,
02 - JUN - 1998,
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04 - JUN - 1998,
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16-JUN-1998;
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antibodies can also be used in the different screening, therapeutic and biological assays. The present sequence represents a PRO protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVLTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
                                                                                                                                  Gaps
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horse; cow; dog; cat; sheep; pig; goat; rabbit; ADEPT;
antibody-dependent enzyme mediated prodrug therapy.
                                                                                                                                .
0
                                                                                            Length 431;
                                                                                                                                0; Indels
                                                                                    Query Match 100.0%; Score 2211; DB 6; Best Local Similarity 100.0%; Pred. No. 4.9e-173; Matches 431; Conservative 0; Mismatches 0;
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97US-0062250P.
97WO-US020069.
97US-0065311RP.
97US-0066770P.
9RUS-0075945P.
98US-0078312P.
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                                                       Sequence 431 AA;
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17-OCT-1997;
05-NOV-1997;
12-NOV-1997;
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28-APR-1998;
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98US-009532P.
98US-009532P.
98US-009731P.
98US-013295P.
99US-0144758P.
99US-0144758P.
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99US-0144758P.
99US-0145222P.
02-JUL-1998;
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44-AUG-1998;
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17-SEP-1998;
07-OCT-1998;
01-DEC-1998;
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EASPGSSSOGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLGRILSESLRRKRYSRL 420
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100.0%; Score 2211; DB 6;
Best Local Similarity 100.0%; Pred. No. 4.9e-173;
Matches 431; Conservative 0; Mismatches 0;
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99WO-US030095.
2000WO-US000119.
2000WO-US000376.
2000WO-US000376.
2000WO-US0004414.
2000WO-US004414.
2000WO-US004414.
2000WO-US004414.
2000WO-US006814.
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  16-DEC-1999;
20-DBA-2000;
20-DBA-2000;
20-DBA-2000;
20-DBA-2000;
218-BB-2000;
22-FEB-2000;
24-FEB-2000;
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25-MAR-2000;
26-MAR-2000;
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neonatal heart; angiogenesis; wound healing;
Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing; cardiac insufficiency disorder; cancer; tumour; immune response; adrenal cortical capillary endothelial growth; c-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial growth inhibitor; T-lymphocytes stimulation; retinal neurons cell survival; rod photoreceptor cell survival; retinal disorder; retinitis pigmentosum, kidney disorder; mammalian kidney mesangial cell proliferation; Berger disease; dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation; chondrocyte redifferentiation; sports injury; arthritis.
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9705-0065186P

9705-0065186P

9705-0065186P

9805-0065180P

9805-0083322P

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                                                                                                               Homo sapiens.
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wa, Pan J, Pr
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Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan
Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams
                                                                                                                                                                                                                Botstein D,
                   99WO-US021547.
99WO-US028313.
99WO-US028301.
99WO-US028634.
                                                                                                                       2000WO-US014042
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                                                                                                                                                                                                              Ashkenazi AJ, Baker KP, Bo
Perrara N. Fong S, Gerber
                                                                                                                                                                                                      (GETH ) GENENTECH INC.
                                                                          24-FEB-2000;
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                        30-NOV-1999
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01-DEC-2000;
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Godowski PJ; Paoni NF; Wood WI;

#### WPI; 2003-247083/24. N-PSDB; ABX80473.

is isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346 PRO1375, which stimulate proliferation of stimulated T-lymphocytes therapeutically useful for enhancing immune response and in cancer treatments Novel and are

# Claim 12; Fig 328; 648pp; English.

The invention describes an isolated human PRO polypeptide. The PRO polypeptides are useful in detecting PRO polypeptides in a sample, in polypeptides are useful in detecting PRO polypeptides in a sample, in inking a bioactive molecule to a cell expressing a RO polypeptide, and in modulating at least one biological activity of a cell expressing a PRO polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus timulate adrenal cortical capillary endothelial growth, and PRO136, PRO943, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1126, PRO943, PRO828, PRO826, PRO1068 or PRO535, PRO816, and are thus useful for treating conditions or disorders where angiogenesis would be beneficial, e.g. wound healing and antagonist of this polypeptide are useful for treating cancerous tumours. PRO812 inhibits vascular endothelial growth factor (VBGF) stimulated proliferation of endothelial cells and is thus useful for inhibiting endothelial cell growth. PRO826, mammals which would be beneficial in inhibiting tumour growth.

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US2003032023-A1
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24-JUN-1998
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        stimulated T-lymphocytes and are therapeutically useful for enhancing immune response. PRO828, PRO826, PRO1068 or PRO1132 enhance survival of retinal neurons cells (PRO1132 is also enhances survival/proliferation of rod photoreceptor cells) and therefore are useful for treating retinal disorders of injuries, e.g. retinitis pigmentosum, AMD. PRO819, PRO813 and PRO11066 induce proliferation of mammalian kidney mesangial cells, and therefore are useful for treating kidney disorders associated with decreased mesangial cells inchropathies associated with dermatitis, herpetiformis or Crohn's nephropathies associated with dermatitis, herpetiformis or Crohn's proliferation and/or redifferentiation of chondrocytes in culture and are thus useful for treating sports injuries, and arthritis. This is the amino acid sequence of a novel human PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
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 PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of
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100.0%; Pred. No. 4.9e-173;
ive 0; Mismatches 0;
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Best Local Similarity 100.
Matches 431; Conservative
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Pred. No. 4.9e-173;
Mismatches 0;
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99US-0143048P-
99US-0145698P-
99US-0146222P-
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99WO-US021647-
99WO-US0218313-
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2000WO-US004914.
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2000WO-US013358.
2000WO-US013705.
2000WO-US014042.
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Best Local Similarity 100.0%;
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             99US-0123957P
99WO-US012252
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Gaps

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Length 0; Indela 9 9

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Human, PRO; secreted; transmembrane; signal peptide; pharmaceutical;
diagnostic; therapeutic; gene therapy.
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                                        (first entry
                                                                                    US2002160384-A1
                                                                           Homo sapiens.
                                        01-MAY-2003
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99WO-US012252.
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98WO-US019437
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28-FEB-2001;
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## (GETH ) GENENTECH INC.

Baker KP, Botstein D, Desnoyers L, Eaton ng S, Gerber H, Gerritsen ME, Goddard A, Gurney AL, Kljavin IJ, Napier MA, Pan J, Tt TA, Tumas D, Watanabe CK, Williams PM, Ferrara N, Fong S, Grimaldi JC, Gurney Roy MA, Stewart TA, Ashkenazi AJ, Roy MA, Zhang Z;

### WPI; 2003-288106/28. N-PSDB; ABX90451.

New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, as chromosome markers, or in generating probes.

# Claim 12; Fig 328; 650pp; English.

The invention discloses isolated PRO secreted/transmembrane polypeptides comprising a sequence without signal peptide and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or proteins at least polypuclectides are also useful in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoreais, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO olypeptides and nucleic acids may also be used in tissue typing. Anti-PRO antibodies are useful in diagnostic assays for

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9805-008332P

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9805-008762P

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9805-008802E

9805-008802B

9805-008801P

9805-008811P

9805-0089511P

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98WO-US019330.
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   20 - MAR - 1998;
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PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. The sequences presented in ABU60478-ABU60624 are the PRO polynucleotides of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at sequence.html
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                                                                                                              Gaps
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                                                                                      100.0%; Score 2211; DB 6; Length 431; 100.0%; Pred. No. 4.9e-173; ive 0; Mismatches 0; Indels 0
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Best Local Similarity 100.
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05-NOV-1997;
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Human, PRO, secreted polypeptide, transmembrane polypeptide, cancer; inflammatory disease, atherosclerosis; cardiac injury; AIDS, infertility, blith defect, premature aging, diabetes, dog, cat, horse, acquired immunodeficiency syndrome, cow, sheep, pig, goat, rabbit, industry, cytostatic, antiinflammatory, cardiant, antiinfertility,
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98WO-US025108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polypeptides are section and transmission process. Interpretation polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, and for modulating bioactive molecules to cells expressing PRO polypeptides, and for for identifying agonists or antagonists. The polynuclectide sequences chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of antisense RNA and DNA, in the preparation of pRO polypeptides, for generating transgenic animals or knockout animals, to construct hybridisation probes for mapping the construct hybridisation probes for mapping the individuals with genetic disorders, in gene therapy, for chromosome cidentification, as chromosome markers, and for generating probes for PCR, identification, as chromosome markers, and for generating probes for PCR, identification, as chromosome markers, and for generating probes for PCR, Sequence data for this patent was obtained in electronic format directly from the USPTO web site at sequata.uspto.gov/psipsDIDEntry.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.
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Godowski P
Paoni NF;
Wood WI;
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                        28-JJJ.-2000; 2000WO-US020710.
11-AUG-2000; 2000WO-US02031.
23-AUG-2000; 2000WO-US023522.
24-AUG-2000; 2000WO-US03328.
08-NOV-2000; 2000WO-US0330952.
01-DEC-2000; 2000WO-US0330952.
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20-JUN-2001; 2001WO-US019692.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
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                                                                                ABU72590;
                    RESULT 14
ABU72590
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                                                                                                                                                                                                                                                                                                                                              The invention relates to a human secreted and transmembrane polypeptide (PRO) and the polynucleotide encoding it. The PRO polypeptide or polynucleotide is useful in pharmaceuticals, disquostics, biosensors or bioreactors. These are particularly useful for detecting or treating cancers, inflammatory diseases, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, acquired immunodeficiency syndrome (AIDS) and diabetic complications in mammals, e.g. humans, cats, cattle, horses, sheep, pigs, goats or rabbits. The sequences are also useful in blotechnological and medical research and in various industrial applications. Sequences ABU60230-ABU60245 represent human PRO polypeptides of the invention
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                                                                                                                                                                                                                                           New secreted and transmembrane polypeptides (e.g. PRO241, for use in pharmaceuticals, diagnostics or bioreactors, particularly for detecting or treating e.g. cancers, infertility or acquired immunodeficiency syndrome in mammals.
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                                                                                                                                     Baker KP, Botstein D, Eaton DL, Ferrara N, Filvaroff B;
Gerritsen ME, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL;
Hillan KJ, Kljavin IJ, Napier MA, Roy MA, Tumas D, Wood WI;
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                                                                                                                                                                                                                                                                                                                     Claim 1; Fig 32; 173pp; English.
30-MAR-2000; 2000WO-US008439.
22-MAY-2000; 2000WO-US014042.
28-JUL-2000; 2000WO-US020710.
01-DEC-2000; 2000WO-US032678.
28-FEB-2001; 2001WO-US006520.
                                                                           25-MAY-2001; 2001US-00866028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 100.
Matches 431; Conservative
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ABU75500 standard, protein, 431 AA.

A 58077550 standard, protein, 431 AA.

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XX Whunan; Secreted and transmembrane protein protein cytostatic; anti-HIV;

XX Whunan; Secreted and transmembrane protein cytostatic; anti-HIV;

XX Whunan; Secreted and transmembrane protein cytostatic; anti-HIV;

XX Whunan; Paparotrophic; anti-HIAT;

XX Whunan; Paparotrophic; anti-HIAT;

XX Whunan; Paparotrophic; anti-HIAT;

XX Whunan; Paparotrophic; anti-HIAT;

XX Whunan; Paparotrophic;

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18-JUN-1998; 98US-0089801P.
18-JUN-1998; 98US-0089901P.
18-JUN-1998; 98US-0089901P.
16-SEP-1998; 98WO-US019330.
17-SEP-1998; 98WO-US019330.
17-CCT-1998; 98WO-US019437.
01-DEC-1998; 98WO-US019437.
02-JUN-1999; 99WO-US021010.
03-JUN-1999; 99WO-US021090.
15-SEP-1999; 99WO-US021252.
15-SEP-1999; 99WO-US021847.
30-NOV-1999; 99WO-US021847.
30-NOV-1999; 99WO-US0218313.
01-DEC-1999; 99WO-US0218313.
01-DEC-1999; 99WO-US0218313.
01-DEC-1999; 99WO-US0218313.
01-DEC-1999; 99WO-US0318313.
01-DEC-1999; 99WO-US03184114.
01-MAR-2000; 2000WO-US006819.
02-MAR-2000; 2000WO-US006819.
03-MAR-2000; 2000WO-US006819.
03-MAR-2000; 2000WO-US006819.
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17-MAY-2000; 2000W0-US013358.
22-MAY-2000; 2000W0-US014941.
02-JUN-2000; 2000W0-US014941.
02-JUN-2000; 2000W0-US015264.
28-JUL-2000; 2000W0-US020710.
11-ANG-2000; 2000W0-US023522.
24-AUG-2000; 2000W0-US023328.
08-NOV-2000; 2000W0-US023328.
01-DEC-2000; 2000W0-US023328.
01-DEC-2000; 2000W0-US023328.
01-UN-2000; 2000W0-US023328.
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29-JUN-2001; 2001WO-US021066.
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28-AUG-2001; 2001US-00941992.
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The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ACC Deposit No. 20961, 552-PTA, 819-PTA, 209439, 203135, etc); or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, New genes and secreted and transmembrane polypeptides (e.g. PRO183 or PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's sarcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's Godowski PJ; Paoni NF; Wood WI; Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, Claim 12; Fig 328; 663pp; English.

31-AUG-2001; 2001US-00944944.

diabetic complication

US2002173463-A1. Homo sapiens

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inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defect; premature aging; cardiac injury; AIDS; cancer;
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leukaemia or lymphoma), hepatitis B, multiple sclerosis, or Crohn's disease in mammals. The PRO polypeptides are useful in drug screening, particularly as targets for therapeutic intervention in these diseases, and in the diagnostic determination of the presence of these diseases. The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
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100.0%; Pred. No. 4.9e-173;
live 0; Mismatches 0;
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Baker KP, Botstein D, Eaton DL, Ferrara N, Filvaroff E; Gerritsen ME, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL; Hillan KJ, Kljavin IJ, Napier MA, Roy MA, Tumas D, Wood WI;

Search completed: April 26, 2005, 21:49:17

time : 129 secs

Job

### WPI; 2003-311003/30. N-PSDB; ABX96832.

New transmembrane polypeptides and polynucleotides useful for chromosome identification, tissue typing, gene therapy, in chromosome and gene mapping, or as molecular weight markers.

## Claim 12; Fig 32; 172pp; English.

The invention relates to an isolated nucleic acid encoding a secreted/
transmembrane polypeptide (designated as PRO proteins). 15 PRO
polypeptides and their encoding polymuclectides are disclosed. Also
comprising the vector comprising the PRO nucleic acid, a host cell
comprising the vector, a process for producing a PRO polypeptide (by,
culturing the host cell under conditions for the expression of the PRO
collypeptide, and recovering at least 80% amino acid sequence identity to
isolated polypeptides, a chimaeric molecule comprising PRO fused to a
che PRO polypeptides, a chimaeric molecule comprising PRO fused to a
che PRO polypeptides, a chimaeric molecule comprising PRO fused to a
cherologous amino acid sequences are useful as hybridisation probes,
to PRO. The PRO nucleotide sequences are useful as hybridisation probes,
con chromosome and gene mapping, in generating sense and antiseanse RNA or
CDNA, in generating transgenic or knock-out animals which can be used in
che development and screening of therapeutically useful reagents, and in
consorme and some mapping, in generating which markers
consorted the development and screening of therapeutically useful reagents, and in
consorme and some any be used as molecular weight markers
consorted any also be used for chromosome identification, and tissue typing
syndrome. Other PRO proteins are variously implicated in immune
consorted inflammatory disease, organ failure, atherosclerosis, cardiac
injury, infertility, birth defects, premature aging, cardiac injury,

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AIDS, cancer and diabetic complications. The present sequence represents a PRO protein
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TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P2548PIC1
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US-09-588-995A-6
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US-09-248-796A-11307
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US-08-28-36LB-18
US-08-28-36LB-18
US-09-588-995A-18
US-09-588-995A-18
US-09-928-36LB-27
US-09-928-36LB-27
US-09-938-1976A-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 83, Application US/09866028; Patent No. 6642360; GENERAL INFORMATION:
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Grimaldi, Christopher
Gurney, Austin
Hillan, Kenneth
Kljavin, Ivar
Napier, Mary
Roy, Margaret
Tumas, Daniel
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Filvaroff, Ellen
Gerritsen, Mary
Goddard, Audrey
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APPLICANT: Botstein, David
APPLICANT: Eaton, Dan
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-866-028-83
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S-08-928-361B-17 S-09-588-995A-17 S-08-700-651-15 S-08-928-361B-20

-09-588-995A-20 -09-538-092-77 -09-345-473E-40

Appl Appl Appl Appl Appl Appl Appl

Sequence Sequence Sequence

Sequence Sequence

Sequence Sequence Sequence

-09-216-393B-344 -08-078-683A-8 -09-216-393B-341

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US-08-471-970A-8 US-09-723-677B-8 US-08-928-361B-5

Sequence

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Query Match
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APPLICANT: MOVE, WAISHEL
APPLICANT: WOOD, WAISHER
APPLICANTON: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P2484PIC.
CURRENT APPLICATION NUMBER: US/09/944,457
CURRENT FILING DATE: 2001-09-26
FRIOR FILING DATE: 2001-05-25
FRIOR PILING DATE: DOORNOWER: 60/069,33
FRIOR PILING DATE: December 11, 1997
FRIOR PILING DATE: December 12, 1997
FRIOR PILING DATE: December 16, 1997
FRIOR PILING DATE: December 17, 1997
FRIOR FILING DATE: December 17, 1997
FRIOR PILING DATE: December 17, 1997
FRIOR PILING DATE: December 18, 1997
FRIOR FILING DATE: DECEMBER: 60/069, 8017
FRIOR FILING DATE: December 18, 1997
FRIOR FILING DATE: DECEMBER: 60/069, 8017
FRIOR FILING DATE: DECEMBER: 60/06
                                                                                                                                                                                                                                                                                                   361 EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
                                     TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLLSTVFTRAAATLQAMATT 300
                                                                                                                                                                            TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAATLQAMATT 300
HLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA 240
                                                                                                                                                                                                                                                             AVLITITOAPIDSKGSLETIPFIEISNLTLNIGNVYNPIALSMSNVESSIMNKIASWEGR 360
                                                                                                                                                                                                                                                                                                                                                                                           EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 83, Application US/09944457
Patent No. 6734288
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Godowski, Paul
Grimaldi, Christopher
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Filvaroff, Ellen
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Hillan, Kenneth
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APPLICANT: Botstein, David
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Tumas, Daniel
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61 EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
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100.0%; Pred. No. 2.9e-202;
tive 0; Mismatches 0;
                                                        PRIOR FILING DATE: February 9, 1998
PRIOR PILING DATE: February 25, 1998
PRIOR PILING DATE: February 25, 1998
PRIOR PILING DATE: Pebruary 25, 1998
PRIOR PILING DATE: December 16, 1998
PRIOR PILING DATE: December 16, 1998
PRIOR PILING DATE: December 16, 1998
PRIOR PILING DATE: JOCCHMER: 60/113,296
PRIOR PILING DATE: JOCCHMER: 60/1146,222
PRIOR PILING DATE: September 16, 1998
PRIOR PILING DATE: December 1, 1998
PRIOR PILING DATE: December 1, 1998
PRIOR PILING DATE: December 16, 1999
PRIOR PILING DATE: POCCHMER: 09/218,517
PRIOR PILING DATE: December 16, 1999
PRIOR PILING DATE: September 15, 1999
PRIOR PILING DATE: SEPTEMBER: PCT/US99/28301
PRIOR PILING DATE: NO. 6734286ember 30, 1999
PRIOR PILING DATE: PECTUARY 1, 2000
PRIOR PILING DATE: PEDRUARY 1, 2000
PRIOR PILING DATE: MARCH 2, 2000
PRIOR PILING DATE: PEDRUARY 1, 2000
PRIOR PILING DATE: MARCH 2, 2000
PRIOR PILING DATE: PEDRUARY 1, 2
                                                    OR FILING DATE: February 9, 1998
OR APPLICATION NUMBER: 60/075,945
OR FILING DATE: February 25, 1998
OR PILING DATE: February 25, 1998
OR PILING DATE: December 16, 1998
OR APPLICATION NUMBER: 60/113,296
OR FILING DATE: December 22, 1998
OR APPLICATION NUMBER: 60/146,222
OR FILING DATE: July 28, 1999
OR APPLICATION NUMBER: PCT/US98/19330
OR APPLICATION NUMBER: PCT/US98/19330
LING DATE: February 9, 1998
PLICATION NUMBER: 60/074,092
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Matches 431; Conservative
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SEQ ID NO 83
LENGTH: 431
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CORGANISM: Homo Sapien
US-09-944-457-83
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Sequence 1258, Application US/09538092
; Sequence 1258, Application US/09538092
; Patent No. 675314
; GENERAL INFORMATION:
; APPLICANT: Glot, Lot,
; APPLICANT: Glot, Lot,
; TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same;
; FILE REFERENCE: 15966-54
; CURRENT APPLICATION NUMBER: US/09/538,092
; CURRENT FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: 60/127,352
; PRIOR PLILING DATE: 1999-04-01
; PRIOR PLILING DATE: 2000-02-01
; PRIOR FILING DATE: 2000-02-01
; NUMBER OF SEQ ID NOS: 1387
; SEQ ID NOS: 1387
; SEQ ID NOS: 1387
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                                           158 TDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAH 217
                                                                                                                                218 LLPENVSALPATVAVASPHT----TSATPKPATL-LPTNASV----TPS--GTSQPQLA 265
                                                                                                                                                         TTAPPVTTVTSOPPTTLISTVFTRAAATLOAMATTAVLTTTFOA-PTDSKGSLETIPFTE 324
                                                                                                                                                                                                                                                   325 ISNLTLNTGNVYNPTA---LSMSNVESSTMNKTASWEGREASPGSSSOGSVPENQYGLPF 381
                                                                                                                                                                                                                                                                                                                                                      170 VPPMX-----PQAQGPISQVSVDQPVVNTT------XKSTXMPSNTTXEPL 209
                                                                         220 PENVSALPATVAVASPHTTSATPKPATL--LPTNASVTP--SGTSQPQLATTAPPVTTVT
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        210 TQAVVDKTLLLVVLLGVTLFITVLVLFALQAYESYKKKDYTQVDYLINGMYAD 263
                                                                                                                                                                                                                                                                                                                                                                                               382 -----EKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVD 430
26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.8%; Score 149.5; DB 4; Length 5179; 34.1%; Pred. No. 0.00095; ive 12; Mismatches 52; Indels 19;
Mismatches 116; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: (0)...(0)
OTHER INFORMATION: Polypeptide Accession Number Q02817
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Patent No. 6350859
GENERAL INFORMATION:
APPLICANT: Massachusetts Institute of Technology
42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 34.18
Matches 43; Conservative
  Conservative
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                                                                                                                                                                                                                                                                                          361 EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
                                                                                                                241 TPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLLSTVFTRAAATLQAMATT 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                equals any of the naturally occurring L-amino acids
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                                  181 HLEKLFKMDEASAQULAYKEKGHSQSSQFSSDQBIAHLLPENVSALPATVAVASPHTTSA
                                                                                                                                                                                                                                                               EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
HLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA
                                                                                                                                                                            301 AVLITTFQAPIDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
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Pred. No. 5e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: PZ031P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/489,847

CURRENT FILING DATE: 2000-01-24

EARLIER APPLICATION NUMBER: CT/US99/17130

EARLIER FILING DATE: 1999-07-29

EARLIER FILING DATE: 1998-07-30

EARLIER PLICATION NUMBER: 60/095,486

EARLIER PELING DATE: 1998-08-05

EARLIER PELING DATE: 1998-08-05

EARLIER APPLICATION NUMBER: 60/095,486

EARLIER APPLICATION NUMBER: 60/095,486

EARLIER APPLICATION NUMBER: 60/095,454

EARLIER FILING DATE: 1998-08-06

EARLIER PILING DATE: 1998-08-06

EARLIER PILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06

EARLIER FILING DATE: 1998-08-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 332, Application US/09489847 Patent No. 6476195 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.3%;
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SEQ ID NO 332
LENGTH: 266
                                                                                                                                                                                                                                                                                                                                                        DYLINGIYVDI 431
                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: SITE
LOCATION: (199)
OTHER INFORMATION: Xaa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
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LOCATION: (97)
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LOCATION: (195)
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181
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22, 45, 59, 72, 77, 99, 113, 125, 136, 144, 216, 217, 254, 310, 339, 343, 361, 363, 367, 373, 374 and 381 represent potential disulfide linkages."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       375 NOYGLPFEKWLLIGSLLFGVLFLVIGLVLL 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            represent a putative cytoplasmic domain."
                                                                                 NAME/KEY: Modified-site LOCATION: 338.381
                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                             represent a putative TM
                                                                                                                                                                                                                                                                                                                 NAME/KEY: Domain
LOCATION: 544..564
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 565..629
OTHER INFORMATION:
                                                                                                         LOCATION: 338..381
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                      Domain
                                                                                                                                                                                      NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
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                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE
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US-08-265-428-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              496
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LOCATION: 1..629
OTHER INFORMATION: /Function = "Amino acid sequence for the
Drosophila Melanogaster Scavenger Receptor
Class CI."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Amino acids 21-74 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Disulfide-bond
LOCATION: 22..381
OTHER INFORMATION: /note= "The cysteines at positions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: /note= "Amino acids 1-20 represent
TITLE OF INVENTION: Class BI and CI Scavenger Receptors NUMBER OF SEQUENCES: 8 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: /note= "Positions 30-32, 90-92, 129-131, 180-182, 253-255 and 351-353 represent potential N-glycosylation
                                                                                                                                                                                                                                      MEDLUM ITER: FLODEY GIBER

COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
PPLICATION NUMBER: US/09/241,581B
FILING DATE: 02-Peb-1999
CLASSIFICATION: cUnknown>
ATTORNEY/AGENT INFORMATION:
NAME: Paber: Patera L.
NAME: PATENT AND NUMBER: MIT6620
TELERATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: MIT6620
TELEPHONE: (404) 873-8794
TELEPHONE: (404) 873-8795
INFORMATION: CONTRACTOR OF 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Amino acids 128-312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Amino acids 75-127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 75..127
OTHER INFORMATION: /note= "Amino aci
represent complement control protein
                                                            ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center
1201 West Peachtree Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Modified-site
LOCATION: 21..74
OTHER INFORMATION: /note= "Amino
complement control protein domain
number 1."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a putative signal sequence."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Modified-site
LOCATION: 128.312
OTHER INFORMATION: /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   represent an MAM domain."
                                                                                                                                                                                ZIP: 30309-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Modified-site LOCATION: 30..353
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 629 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 30..353
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HYPOTHETICAL: NO
FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              domain number 2.
                                                                                                                                                STATE: Georgia
COUNTRY: USA
                                                                                                                          CITY: Atlanta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
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213 QEIAHLLPENVSALPATVAVASPHT-----TSATPKPATLLPTNASVTPSGTSQ 261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322 FTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASW-----EGREASPGSSSQGSVPE 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 383 KELLTTTEDDISSLPPTVTSTSTTTKKSTTTTTTTTTTTTTTKRPTTTTTKATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Modified-site
LOCATION: 578..592
OTHER INFORMATION: /note= "Amino acids 578-580 and
590-592 represent protein kinase C
sites."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 629;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 576..602
OTHER INFORMATION: /note= "Amino acids 576-579 and 07HER INFORMATION: /note= "Amino acids 576-579 and sites."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: Modified-site
LOCATION: 596..599
OTHER INFORMATION: /note= "Amino acids 596-599
represent a CAMP protein kinase site."
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                 LOCATION: 387..514
OTHER INFORMATION: /note= "Amino acids 387-514 represent a mucin-like potential O-linked glycosylation region."
                                                                                                                                                                                                                                                                     /note= "Amino acids 544-565
TM domain."
OTHER INFORMATION: /note= "Amino acids 338-381 represent a somatomedin B domain."
                                                                                                                                                                                                                                                                                                                                                                                             /note= "Amino acids 565-629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 6.6%; Score 145.5; DB 3
Best Local Similarity 22.9%; Pred. No. 7.6e-05;
Matches 48; Conservative 30; Mismatches 79
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213 QEIAHLLPENVSALPATVAVASPHT-----TSATPKPATLLPTNASVTPSGTSQ 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496 ----TIMIPTSSTEKTTGI----ITTMKTRKRITWNVDPQDIEGHMDTSGSTDNPALV- 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    262 PQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATTAVLTTTFQAPTDSKGSLETIP 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322 FTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASW-----EGREASPGSSSQGSVPE 374
                                                                                                                        /note= "Amino acids 387-514 represent a mucin-like potential O-linked glycosylation region."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Amino acids 576-579 and 599-602 represent casein kinase II sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                443 KRTTTTTKKPTTTSTTPKPTTTSTTSTTSTTSTTSTTPTTTTTTINVFTTKK
                                                                                                                                                                                                                                                                                                                                                                                  /note= "Amino acids 565-629 represent a putative cytoplasmic domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.6%; Score 145.5; DB 4; Length 629;
22.9%; Pred. No. 7.6e-05;
tive 30; Mismatches 79; Indels 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Amino acids 596-599 represent a CAMP protein kinase site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Amino acids 578-580 and 590-592 represent protein kinase C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Massachusetts Institute of Technology
AUMBER OF INVANTION: Class BI and CI Scavenger Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Allantic Center
STREET: 1201 West Peachtree Street
                             represent a somatomedin B domain."
                                                                                                                                                                                                           NAME/KEY: Domain
LOCATION: 544..564
OTHER INFORMATION: /note= "Amino acids 544-565
OTHER INFORMATION: represent a putative TM domain."
FEATURE:
NAME/KEY: Domain
LOCATION: 565..629
OTHER INFORMATION: represent a putative cytoplasmic
       OTHER INFORMATION: /note= "Amino acids 338-381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||:|:||:||:
----VLYLLLGIVLV 557
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STATE: Georgia
COUNTRY: USA
ZIP: 30309-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                    NAME/KEY: Modified-site
LOCATION: 387.514
OTHER INFORMATION: /note=
OTHER INFORMATION: glycosy
FRATURE:
NAME/KEY: Domain
LOCATION: 544.564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: Modified-site
LOCATION: 578..592
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 22.99
Matches 48; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Modified-
LOCATION: 576..602
OTHER INFORMATION: ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 578..592 OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATION: 596..599 CTHER INFORMATION: OTHER INFORMATION: US-08-265-428-6
                          OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT-US95-07721-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 1..629
OTHER INFORMATION: /Function = "Amino acid sequence for the Drosophila Melanogas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "The cysteines at positions 22, 45, 59, 72, 77, 99, 113, 125, 136, 144, 216, 217, 254, 310, 339, 343, 361, 363, 367, 373, 374 and 381 represent potential disulfide linkages."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "Amino acids 75-127
represent complement control protein domain number
2."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 30.353
OTHER INFORMATION: /note= "Positions 30-32, 90-92,
OTHER INFORMATION: 129-131, 180-182, 253-255 and 351-353 represent
OTHER INFORMATION: potential N-glycosylation sites."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "Amino acids 21-74 represent complement control protein domain number 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 11.20
OTHER INFORMATION: /note= "Amino acids 1-20 represent
OTHER INFORMATION: a putative signal sequence."
                                                                                                                   STATE: Georgia
COUNTRY: USA
ZIP: 30109-4530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/265,428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 128..312
OTHER INFORMATION: /note= "Amino acids 128-312
OTHER INFORMATION: represent an MAM domain."
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Patrea L. Pabst
STREET: 1100 Peachtree Street, Suite 2800
                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIPICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: MIT6620
TELECHONE: (404) 815-6508
TELEPAX: (404) 815-6508
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 629 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: Modified-site
LOCATION: 21.74
OTHER INFORMATION: Compler
FEATURE:
NAME/KEY: Modified-site
LOCATION: 75.127
OTHER INFORMATION: /foct=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: Modified-site
LOCATION: 128.312
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NAME/KEY: .Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc. feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 22.381
OTHER INFORMATION: OTHER INFORMATION: OTHER INFORMATION: OTHER INFORMATION: ERATURE:
NAME/KE: Modified-ELOCATION: 338.381
                                                                                             CITY: Atlanta
STATE: Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
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OTHER INFORMATION: OTHER INFORMATION:
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SEQ ID NO 647
LENGTH: 1140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULOSI: ALLICAL
MOLECULE TYPE: protein
HYPOTHET TYPE: protein
HYPOTHET TYPE: internal
FRAGMENT TYPE: internal
FRATURE:
NAME/KEY: misc. feature
LOCATION: 1..629
CTHER INFORMATION: /Function = "Amino acid sequence for the
OTHER INFORMATION: LISSOPHILA Melanogaster Scavenger Receptor
OTHER INFORMATION: Class CI."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "Positions 30-32, 90-92, 129-131, 180-182, 253-255 and 351-353 represent potential N-glycosylation sites."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Amino acids 75-127 represent complement control protein domain number 2."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Amino acids 21-74 represent complement control protein domain number 1."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PATURE:
NAME/KEY: Modified-site
LOCATION: 338.381
OTHER INFORMATION: represent a somatomedin B domain."
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a putative signal sequence."
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NAME/KEY:
NOALfied-site
LOCATION:
OTHER INFORMATION:
NAME/KEY:
NAME/KEY:
OTHER INFORMATION:
OTHER I
                           OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07721
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LOCATION: 387..514
OTHER INFORMATION: /note= "Amino acids 387-514
                                                                                                                                                                                FILING DATE:
CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: MIT6620
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404) 873-8794
   IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 629 amino acids
TYPE: amino acid
TOPOLOGY: linear
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NAME/KEY: Disulfide-bond
LOCATION: 22.381
OTHER INFORMATION: 22, 45,
OTHER INFORMATION: 22, 45,
OTHER INFORMATION: 217, 25
OTHER INFORMATION: and 381
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383 KELLITITEDDISSLPPTVISISITRKSTITITITITITITITITKRPTITITIKATIT 442
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262 PQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATTAVLTTTFQAPTDSKGSLETIP 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       322 FTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASW-----EGREASPGSSSQGSVPE 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Giot, Loic
APPLICANT: Giot, Loic
APPLICANT: Mansfield, Traci A.
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
FILE REFERENCE: 15966-54
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT FILING DATE: 2000-03-29
PRIOR PELING DATE: 1999-04-01
PRIOR FILING DATE: 1999-04-01
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CuraPatSeqFormatter Version 0.9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 629;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Modified-site
LOCATION: 596..599
O'THER INPORMATION: represent a cAMP protein kinase site."
PCT-US95-07721-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "Amino acids 578-580 and 590-592 represent protein kinase C sites."
                                                                                                                                                                                                                                                                                                                                                                                              II
                                                                                                                                                                                                                                /note= "Amino acids 565-629 represent a putative cytoplasmic domain."
                                                                                                                                                                                                                                                                                                                                                                    /note= "Amino acids 576-579 and 599-602 represent casein kinase sites."
represent a mucin-like potential O-linked glycosylation region."
                                                                                                                /note= "Amino acids 544-565 represent a putative TM domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 6.6%; Score 145.5; DB 5; Best Local Similarity 22.9%; Pred. No. 7.6e-05; Matches 48; Conservative 30; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            375 NOYGLPFEKWLLIGSLLFGVLFLVIGLVLL 404
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Patent No. 6753314
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                               LOCATION: 576..602
OTHER INPORMATION: /note=OTHER INPORMATION: sites./
OTHER INPORMATION: sites./
FRATURE:
NAME/KEY: Modified-site
LOCATION: 578..592
OTHER INFORMATION: /note=OTHER INFORMATION: sites./
                                                                                                                                                                                   NAME/KEY: Domain
LOCATION: 565.29
OTHER INFORMATION: repress
OTHER INFORMATION: domain
FEATURE:
NAME/KEY: Modified-site
                                           FEATURE:
NAME/KEY: Domain
LOCATION: 544.564
OTHER INFORMATION: /
OTHER INFORMATION: /
PEATURE:
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APPLICANT: Sternberg, Paul W.
APPLICANT: Barr, Maureen M.
TITLE OF INVENTION: BCLYCYSTIC KIDNEY DISEASE GENE HOMOLOGS REQUIRED FOR MALE MA
TITLE OF INVENTION: BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
FILE REFERENCE: 18021-2901B
CURRENT APPLICATION NUMBER: US/09/479,467A
CURRENT FILING DATE: 2000-01-06
PRIOR FILING DATE: 1999-01-06
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Patent No. 6753314

GENERAL INFORMATION:
APPLICANT: Giot, Loic
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
FILE REPERENCE: 1596-542

CURRENT APPLICATION NUMBER: US/09/538,092

CURRENT FILING DATE: 2000-03-29

PRIOR FILING DATE: 1999-04-01

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 2000-03-29

PRIOR PRIOR FILING DATE: 2000-03-04

PRIOR FILING DATE: 2000-02-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.2%; Score 136; DB 4; Length 3178; 23.6%; Pred. No. 0.0084;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LOCATION: (0)...(0) ; OTHER INFORMATION: Polypeptide Accession Number YOL105C US-09-538-092-712
                                                        516 SSVSSTASSTQSSTSTTQSSTTTKSETTTSSDGTNPD 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LSMSNVESSTMNKTASWEG---REASPGSSSQGSVPE 374
                                341 LSMSNVESSTMNKTASWEG---REASPGSSSOGSVPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CuraPatSegFormatter Version 0.9
                                                                                                                                                                                     Sequence 4, Application US/09479467A Patent No. 6723557 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: C. Elegans Lov-1 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Saccharomyces cerevisiae
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SOFTWARE: CuraPatSegFormat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 37; Conserv
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                                                                                                                                          RESULT 10
US-09-479-467A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3178
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LENGTH: 556
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APPLICANT: Sternberg, Paul W.
APPLICANT: Barr, Maureen M.
APPLICANT: BEAT, Maureen M.
POLYCYSTIC KIDNEY DISEASE GENE HOMOLOGS REQUIRED FOR MALE MAT
TITLE OF INVENTION: BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
FILE REFERENCE: 18021-2901B
FURENT APPLICATION NUMBER: US/09/479,467A
CURRENT FILING DATE: 2000-1-06
PRIOR APPLICATION NUMBER: 60/115,127
PRIOR APPLICATION NUMBER: 1999-01-06
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PATENTIN VEY: 2.00
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                                                                                                                                                                                                                                                                                                      510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   564 ASPLPSVWSDITSSEASSISSNLASSAPSDNNSTIASASLIVT----KTKNSVVSSIV 618
                                                                                                                                                                                                                                                                                                                                                                            59 TQEDCINSCCSTKN-----ISGDKACNLMIFDTRKT-ARQPNCYLFFCPNEEACP 107
                                                                                                                                                                                                                                                                                                                                                                                                                                     108 LKPAKGLMSYRIITDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDIS 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168 WRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQ------FSSDQEI 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           619 SSITSSETTNESN-----LATSSTSLLSNKATARSLSTSNATSASNVPTGTFSSMSSH 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     216 AHLLPENVSALPATVAVASP------HTTSATPKPATLLPTNASVTPSGTSQPQL 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              265 ATTAPPVITVISQPPTILISTVFTRAAATLQAM-----ATTAVLITTFQAPIDSKG 315
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                                                                                                                                                                                                                                                                                1 MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVID--IQSSLSKGIRGNEPVYTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221 ENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               405 EEPSTSTTTTEVTSTSSTVTTTEPTTTLTTSTASI-----STTEPSTSTVTTSPST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                            87;
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                                                                                                                                                               Length 1140;
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                                               ; LOCATION: (0) ... (0) ... (0); COTHER INFORMATION: Polypeptide Accession Number YMR317W US-09-538-092-647
                                                                                                                                                           Query Match 6.5%; Score 144.5; DB 4;
Best Local Similarity 21.2%; Pred. No. 0.00025;
Matches 86; Conservative 63; Mismatches 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: C. Elegans Lóv-1 sy582 deletion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15, Application US/09479467A Patent No. 6723557
    cerevisiae
ORGANISM: Saccharomyces
                       FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 37; Conserv
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APPLICANT: Ster
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SEQ ID NO 15
LENGTH: 2870
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                                                                                      360 ATAAASNNRSNSTSKQRLSGGAIAGIVIGVVFGVIFII--LILLELLIWR---RRKSHDQL 414
                                                           164 TDISWRDTLSOKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENV 223
                                                                                                                                          224 SALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLI 283
                                                                                                                                                                                                                       ----TIFQAPIDS-----KGSLETI 320
                                                                                                                                                                                                                                                                                                     321 PFTEISNLTLNTG------NVYNPTALSMSNVESSTMNKTASWEGREASPGSS 367
                                                                                                                                                                                                                                                                                                                                            300 STPKVTSMTPSTSSTIPIVTSVELVTSVVTKAIVSTSDQHQETIFVTRTSVVERSSEVAT 359
                                                                                                                                                                                                                                                                                                                                                                                    368 SQGSVPENQYGLPFEKWLLIGSL-----LFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09294663
Sequence 10. 6765127
GENERAL INFORMATION:
APPLICANT: Granados, Robert R
APPLICANT: Wang, Ping
TITLE OF INVENTION: A No. 6765127el Invertebrate Intestinal Mucin
TITLE OF INVENTION: AND and Related Products and Methods
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Pinnisi & Michaels, P.C.
STREET: 118 No. 6765127th Tloga Street
                        62;
  1 Similarity 22.6%; Pred. No. 0.00097;
68; Conservative 57; Mismatches 114; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 14650
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Michaels, Christopher A
REGISTRATION NUMBER: 34,390
REFERENCE/DOCKET NUMBER: BTI-39-CIP
TELECOMUNICATION INFORMATION:
TELEPANE: (607) 256-200
TELEPANE: (607) 256-3628
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 788 amino acids
                                                                                                                                                                                                                         284 STVFTRAAATLQAMATTAVLT-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 19-APR-1999
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/103,429
FILING DATE: 24-UN-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UMBER: US/09/294,663
19-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: sir
Best Local Similarity
Matches 68; Conserva
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STATE: NY
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220 PENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPP 279
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                                                                                                                                                                                                                                                                                                                                                                                               280 TILISTVETRA-AATLOAMATTAVLTITFOAPTDSKGSLETIPFTEISNLTLNTGNVYNP 338
                                                                                                                                                                                              14; Gaps
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Sequence 4, Application US/09294663

Patent No. 6765127

GENERAL INFORMATION

APPLICANT: Granados, Robert R

APPLICANT: Granados, Robert R

APPLICANT: Granados, Robert R

TITLE OF INVENTION: A No. 6765127e1 Invertebrate Intestinal Mucin

TITLE OF INVENTION: CDNA and Related Products and Methods

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Brown, Pinnisi & Michaels, P.C.

STREET: 118 No. 6765127th Tioga Street

CITY: Ithaca
                                                                                                                                     Query Match 6.0%; Score 132; DB 4; Length 788; Best Local Similarity 31.0%; Pred. No. 0.0021; Matches 48; Conservative 15; Mismatches 78; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.30
CUBRENT APPLICATION DATA:
PLILCATION NUMBER: US/09/294,663
FILING DATE: 19-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      339 TALSMSNVESSTWNKTASWEGREASPGSSSQGSVP 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            209 AATTPAATTPAATTPAAT-----TPGVPAPTSAP 237
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REGISTRATION NUMBER: 34,390
REFERENCE/DOCKET NUMBER: BTI-39-CIP
ORIGINAL SOURCE:
ORGANISM: Trichoplusia ni
TISSUE TYPE: peritrophic membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/103,429
FILING DATE: 24-UN-1998
ATTORNEY/AGENT INFORMATION:
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IISSUE TYPE: peritrophic membrane
US-09-294-663-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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TELEPHONE: (607) 256-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (607) 256-3628
INFORMATION FOR SEQ ID NO: (
SEQUENCE CHARACTERISTICS:
LENGTH: 807 amino acids
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STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 14850
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Itha
STATE: NY
                                                                                  US-09-294-663-3
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385 Sherman Avenue, Suite 6
                                                                                              COUNTRY:
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APPLICANT: LEECH, JAMES
APPLICANT: LEECH, JAMES
APPLICANT: LEECH, JAMES
APPLICANT: NELSON, RICHARD, C.
APPLICANT: WITH SERVICE APPLICANT: GUT, JIRI
TITLE OF INVENTION: VACCINES, ANTIBODIES, PROTEINS, GLYCOPROTEINS, DNAS AND RNAS
TITLE OF INVENTION: FOR PROPHYLAXIS AND TREATMENT OF CRYPTOSPOCIDIUM PARVUM
TITLE OF INVENTION: LIPECTIONS
FILLE REPERENCE: 480.19-4 (HV)
CURRENT APPLICATION NUMBER: US/08/700,651B
CURRENT FILLING DATE: 1997-08-14
BARLIER APPLICATION NUMBER: 08/415,751
BARLIER FILLNG DATE: 1995-04-03
NUMBER OF SEQ ID NOS: 15
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                                                                                         220 PENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPP 279
                                                                                                                                       PABITOAPAI -- TOAPITIOA - PITITOAPITITOAPITITOAPITITOAP -- - TITOAPI 149
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                                              14; Gaps
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5.8%; Score 129; DB 3; Length 175;
Best Local Similarity 27.3%; Pred. No. 0.00036;
Matches 35; Conservative 15; Mismatches 74; Indels
                                           Indels
Pred. No. 0.0022;
                                                                                                                                                                                                                                                                                                                                209 AATTPAATTPAATTPAAT-----TPGVPAPTSAP 237
                                                                                                                                                                                                                                                                                            339 TALSMSNVESSTMNKTASWEGREASPGSSSQGSVP 373
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          31.0%; Preα. ν.ς.
-ive 15; Mismatches
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Patent No. 6071518
GENERAL INFORMATION:
TITLE OF INVENTION:
CORRESPONDENCE ADDRESS:
ADDRESSEE: PETERS, VERNY, JONES & E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/08700651B Patent No. 6015882
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
LENGTH: 175
TYPE: PRT
                                           Conservative
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               Best Local Similarity
Matches 48; Conserv
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286 VFTRAAATLOAMATTAVLITTFOAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSN 345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; DB 3; Length 175;
0.00036;
ches 74; Indels
                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ed. No. 0.00
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 129;
                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/026,062
PILING DATE: 13-8EP-1996
ATTORNEY AGENT INFORMATION:
NAME: Verny, Hana
REGISTRATION NUMBER: 30,518
REFERENCE/DOCKET NUMBER: 480.76-1(HV
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-324-1677
                                                                                                                                                                       CURRENT ARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/928,361B
FILING DATE: 12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Search completed: April 26, 2005, 21:53:37 Job time : 57 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 650-324-1678
INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : 175 amino acida
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match
Best Local Similarity 27.3*
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 175 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                       ZIP: 94306-1840
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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Palo Alto
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                                      USA
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                 April 26, 2005, 21:53:41 ; Search time 1465 Seconds (without alignments) 97.906 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MFFGGEGSLIYTLVIICFLT.....LRRKRYSRLDYLINGIYVDI 431
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1: \cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: \cgn2_6/ptodata/1/pubpaa/PCT_MBA_PUB.pep:*

3: \cgn2_6/ptodata/1/pubpaa/NCT_MBA_PUB.pep:*

4: \cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

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11: \cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

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13: \cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

14: \cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

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10: \cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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2211
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Perfect score:
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Seguence 83, Appl Description Sequence Sequence Sequence Sequence Sequence Sequence S Sequence Sequence Seguence Sequence US-09-989-722-515 US-09-989-723-515 US-09-989-723-515 US-09-989-727-515 US-09-989-727-515 US-09-944-449-83 US-09-944-457-83 US-09-944-457-83 US-09-989-732-515 US-09-991-073-515 US-09-945-587-83 US-09-990-442-515 US-09-866-028-83 ü Query Match Length DB 1000.00 1000.00 1000.00 1000.00 1000.00 1000.00 100.0 Result

Score 2211; DB 9; Length 431; Pred. No. 2.1e-172;

100.0%;

Query Match Best Local Similarity

TYPE: PRT ORGANISM: Homo Sapien

US-09-866-028-83

14	2211	00	m	0	-09-991-163-5	equence 515	
15	2211	8	ന	σ	09-945-	equence 83,	
16	2211	00	m	σ	-09-944-396-83	equence 83,	
17	2211	00	ო	ტ	-09-993-	Sequence 515, App	
18	2211	00	m	σ	-09-990-456-51	515	
19	2211	00	431	σ	-09-944-432-8	83,	
50	2211	00	m	σ	-09-943-762-8	83,	
21	2211	80	ന	σ	-09-944-654-8	83,	
22	2211	80	ന	0	-09-989-721-5	515	
23	2211	00	n	6	9-943-851A-8	83,	
24	2211	00	m	σ	-09-944-413-83	83,	
25	2211	00	m	σ	-09-992-598-5	515	
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27	2211	90.	m	σ	-09-944-896-8	83,	
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53	2211	00	m	σ	-09-989-293A-5	515	
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31	2211	80	m	Φ	-09-990-444-51	515	
32	2211	00	431	σ	-09-944-929-8	83,	
33	2211	00	3	σ	-09-991-181-5	515	
34	2211	00	3	6	-09-989-730-51	equence 515	
35	2211	00	m		944-907	equence 83,	
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37	2211	8	3		993-687-51	equence 515	
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39	2211	-	m	0	-997-65	e 51	
40	2211	-	m	0	-989-724-51	2	
41	2211		3	0	-989-728-51	2	
42	2211	ö	431	0	-990-441-51	51	
43	2211	٠	'n	ដ	9-993-667-51	51	
44	2211	٥.	431		-09-997-428-51	51	
45	2211	100.0	431		09-997-666-51	51	
					ALIGNMENTS		
SULT 1 -09-866-028-83	-028-83	, .					

RESULT 1
US-09-866-028-83
i Sequence 83, Application US/09866028
i Sequence 83, Application US/09866028
i Sequence 83, Application US/09866028
i GENERAL INFORMATION:
i APPLICANT: Batter, Kevin
i APPLICANT: Eaton, Dan
i APPLICANT: Eaton, Dan
i APPLICANT: Gerritsen, Mary
i APPLICANT: Gerritsen, Mary
i APPLICANT: Godowski, Paul
i APPLICANT: Grimaldi, Christopher
i APPLICANT: Grimaldi, Christopher
i APPLICANT: Majer, Matin
i APPLICANT: Majer, Matin
i APPLICANT: Majer, Matin
i APPLICANT: Napier, Mary
i APPLICANT

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PRIOR FILING DATE: 1998-06-04
PRIOR FILING DATE: 1998-06-04
PRIOR PILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088126
PRIOR PELING DATE: 1998-06-05
PRIOR PELING DATE: 1998-06-05
PRIOR PELING DATE: 1998-06-05
PRIOR FILING DATE: 1998-06-05
PRIOR FILING DATE: 1998-06-05
PRIOR PELING DATE: 1998-06-07
PRIOR PELING DATE: 1998-06-10
PRIOR PELING DATE: 1998-06-11
PRIOR PELING DATE: 1998-06-12
              APPLICATION NUMBER: 60/087607
FILING DATE: 1998-06-02
APPLICATION NUMBER: 60/087609
                                                                  FILING DATE: 1997-11-13
APPLICATION NUMBER: 60/066770
                                                                                                              FILING DATE: 1997-11-24
APPLICATION UNDRER: 60/075945
FILING DATE: 1998-02-25
APPLICATION NUMBER: 60/078910
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APPLICATION NUMBER: 60/084600
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FILING DATE: 1998-05-28
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APPLICATION NUMBER: 60/087759
FILING DATE: 1998-06-02
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FILING DATE: 1998-06-03
APPLICATION NUMBER: 60/088021
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FILING DATE: 1998-06-04
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FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/088030
APPLICATION NUMBER: 60/065186
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APPLICATION NUMBER: 60/083322
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 EDCINSCCSTKNISGDKACNLMIPDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII 120
                                                                                                                                                                                                                                  TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD 180
                                                                                                                                                                                                                                                                                                                          181 HLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSA 240
                                                                                                                                                                                                                                                                                                                                                           EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL 420
                                                                                                                                        EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII 120
                                               1 MPFGGEGSLIYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ 60
                                                                                            1 MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIOSSLSKGIRGNEPVYTSTO 60
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ITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITLE OF INVENTION: Acids Encoding the Same
       Gaps
       ..
0
       0; Indels
       0; Mismatches
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CURRENT APPLICATION NUMBER: US/09/989,722
CURRENT FILING DATE: 2001-11-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 515, Application US/09989722
Patent No. US20020072067A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi,Avi J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
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Grimaldi,J.Christopher
Gurney,Austin L.
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Williams, P. Mickey
Wood, William I.
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Stewart, Timothy A.
Tumas, Daniel
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Paoni, Nicholas F.
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Gerber, Hanspeter
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Napier, Mary A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Goddard, Audrey
         Matches 431; Conservative
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Eaton, Dan L.
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US-09-989-722-515
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APPLICATION NUMBER: 60/089532
FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089538
FILING DATE: 1998-06-17
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FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/08908
FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/089947
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APPLICATION UNMBER: 60/090355
FILING DATE: 1998-06-23
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APPLICATION UNMBER: 60/090676
FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090678
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FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/089952
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APPLICATION NUMBER: 60/090246
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FILING DATE: 1998-06-24
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FILING DATE: 1998-06-25
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APPLICATION NUMBER: 60/090862
FILING DATE: 1998-06-26
APPLICATION NUMBER: 60/090863
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            R FILING DATE: 1998-07-01
R APPLICATION NUMBER: 60/091478
R FILING DATE: 1998-07-02
R APPLICATION NUMBER: 60/091544
R FILING DATE: 1998-07-01
R APPLICATION NUMBER: 60/091519
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Patent No. US20020072092A1
GENERAL INFORMATION:
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APPLICATION NUMBER: 60/091982
FILING DATE: 1998-07-07
APPLICATION NUMBER: 60/092182
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APPLICATION NUMBER: 60/091978
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Grimaldi, J. Christopher
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Ferrara, Napoleone
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Goddard, Audrey
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Botstein, David
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ILING DATE: 1998-06-24
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090445
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APPLICATION NUMBER: 60/090540
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FILING DATE: 1998-06-11
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APPLICATION NUMBER: 60/089440
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APPLICATION NUMBER: 60/089600
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1G62
CURRENT APPLICATION NUMBER: US/09/989,723
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
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R FILING DATE: 1997-06-16

R FILING DATE: 1997-10-17

R APPLICATION NUMBER: 60/065250

R FILING DATE: 1997-11-12

R APPLICATION NUMBER: 60/065311

R FILING DATE: 1997-11-12

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FILING DATE: 1998-06-10
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                                                                                                                             Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
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                                                      Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy
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                    lapier, Mary A.
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REPERENCE: P2730P1C56
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CURRENT FILING DATE: 2001-11-19
PRIOR PEPLICATION NUMBER: US/04/9787
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-10-17
PRIOR PELICATION NUMBER: 60/065186
PRIOR PELICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/066770
PRIOR PILING DATE: 1997-11-23
PRIOR APPLICATION NUMBER: 60/078910
PRIOR PILING DATE: 1998-03-25
PRIOR APPLICATION NUMBER: 60/08312
PRIOR PILING DATE: 1998-03-26
PRIOR PILING DATE: 1998-04-28
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PRIOR PILING DATE: 1998-05-02
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PRIOR PILING DATE: 1998-06-02
PRIOR PILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/087607
PRIOR APPLICATION NUMBER: 60/08021
PRIOR APPLICATION NUMBER: 60/088021
PRIOR APPLICATION NUMBER: 60/088021
PRIOR PILING DATE: 1998-06-03
PRIOR APPLICATION NUMBER: 60/088021
PRIOR APPLICATION NUMBER: 60/088026
PRIOR PILING DATE: 1998-06-03
PRIOR PILING DATE: 1998-06-04
PRIOR PIL
                                                                                                        US-09-989-279-515; Sequence 515, Application US/09989279; Sequence 105.08200200072496A1; GENERAL INFORMATION: APPLICANT: ABARCHAZI, AVI J.
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Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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Williams, P. Mickey
Wood, William I.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerber, Hanspeter
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Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goddard, Audrey
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Eaton, Dan L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Godowski, Paul
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHTDYSKPTDISWRDTLSQKFGSSD 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 2211; DB 9;
; Pred. No. 2.1e-172;
0; Mismatches 0;
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R APPLICATION NUMBER: 60/090863

R FILING DATE: 1998-06-26

R APPLICATION NUMBER: 60/091360

R RILING DATE: 1998-07-01

R APPLICATION NUMBER: 60/091478

R FILING DATE: 1998-07-01
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APPLICATION NUMBER: 60/090676
PILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090678
PILING DATE: 1998-06-25
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FILING DATE: 1998-07-01
APPLICATION NUMBER: 60/091519
FILING DATE: 1998-07-02
   FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090557
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FILING DATE: 1998-06-25
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FILING DATE: 1998-07-02
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APPLICATION NUMBER: 60/091978
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APPLICATION NUMBER: 60/092182
FILING DATE: 1998-07-09
                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/090690
                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/090694
FILING DATE: 1998-06-25
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Best Local Similarity 100.0%;
Matches 431; Conservative 0
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APPLICATION NUMBER: 60/089801
FILING DATE: 1998-06-18
PAPLICATION NUMBER: 60/089907
FILING DATE: 1998-06-18
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APPLICATION NUMBER: 60/089947
FILING DATE: 1998-06-19
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APPLICATION NUMBER: 60/088876
FILING DATE: 1998-06-11
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ICATION NUMBER: 60/089440
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FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/089599
FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089600
APPLICATION NUMBER: 60/089653
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FILING DATE: 1998-06-19
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FILING DATE: 1998-06-09
APPLICATION NUMBER: 60/088734
FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088738
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APPLICATION NUMBER: 60/088742
FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088810
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APPLICATION NUMBER: 60/088029
FILING DATE: 1998-06-04
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APPLICATION UNMBER: 60/088202
FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088212
                                                                                                                                                                                                           FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088217
FILING DATE: 1998-06-05
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ICATION NUMBER: 60/088824
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ICATION NUMBER: 60/08861
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APPLICATION NUMBER: 60/088326
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APPLICATION NUMBER: 60/088167
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FILING DATE: 1998-06-19
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PRIOR FILING DATE: 1998-06-23
PRIOR FILING DATE: 1998-06-23
PRIOR APPLICATION UNDRER: 60/09035
PRIOR PLILNG DATE: 1998-06-23
PRIOR PLILNG DATE: 1998-06-23
PRIOR PLILNG DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/09045
PRIOR APPLICATION NUMBER: 60/09055
PRIOR APPLICATION NUMBER: 60/09055
PRIOR PLILNG DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/09057
PRIOR PLILNG DATE: 1998-06-24
PRIOR PLILNG DATE: 1998-06-24
PRIOR PLILNG DATE: 1998-06-24
PRIOR PLILNG DATE: 1998-06-25
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PRIOR PLILNG DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/09069
PRIOR APPLICATION NUMBER: 60/09069
PRIOR APPLICATION NUMBER: 60/09169
PRIOR PLILNG DATE: 1998-06-26
PRIOR PLILNG DATE: 1998-06-26
PRIOR PLILNG DATE: 1998-06-26
PRIOR PLILNG DATE: 1998-07-01

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Length 431; Indels 0 100.0%; Score 2211; DB 9; 100.0%; Pred. No. 2.1e-172; ive 0; Mismatches 0;

Query Match 100. Best Local Similarity 100. Matches 431; Conservative

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FILING DATE: 1998-04-28
APPLICATION NUMBER: 60/084600
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APPLICATION NUMBER: 60/087106
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FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088033
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FILING DATE: 1998-06-02
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APPLICATION NUMBER: 60/087759
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FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088025
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APPLICATION NUMBER: 60/088028
FILING DATE: 1998-06-04
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FILING DATE: 1998-06-04
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FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/088202
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APPLICATION NUMBER: 60/088212
FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088217
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FILING DATE: 1998-06-09
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FILING DATE: 1998-06-10
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FILING DATE: 1998-06-10
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FILING DATE: 1998-06-10
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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088858
FILING DATE: 1998-06-11
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FILING DATE: 1998-06-11
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FILING DATE: 1998-06-16
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FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089599
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APPLICATION NUMBER: 60/087827
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TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD 180
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                                                                                                                                          241 TPKPATILIPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT 300
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrar
FITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730P1C65
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CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR PILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR PLING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/06250
PRIOR APPLICATION NUMBER: 60/065186
PRIOR APPLICATION NUMBER: 60/06511
PRIOR APPLICATION NUMBER: 60/06511
PRIOR PLING DATE: 1997-11-12
PRIOR PLING DATE: 1997-11-24
PRIOR PLING DATE: 1997-11-24
PRIOR PLING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/075945
PRIOR FILING DATE: 1998-02-25
PRIOR FILING DATE: 1998-02-25
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Patent No. US20020072497A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
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Grimaldi, J.Christopher
Gurney, Austin L.
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Williams, P. Mickey
Wood, William I.
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Stewart, Timothy A
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Fong, Sherman
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Botstein, David
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Eaton, Dan L.
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PRIOR FILING DATE: 1998-06-17
RICHARD ALLGATION WUMBER: 60/08563
REIGR FALLING DATE: 1998-06-17
REIGR FILING DATE: 1998-06-17
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REIGR FILING DATE: 1998-06-18
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REIGR FILING DATE: 1998-06-18
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REIGR APPLICATION WUMBER: 60/08908
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REIGR APPLICATION WUMBER: 60/09049
REIGR FILING DATE: 1998-06-22
REIGR REILGR TOWNER: 60/09043
REIGR REILGR DATE: 1998-06-23
REIGR REILGR DATE: 1998-06-24
REIGR REILGR DATE: 1998-06-25
REIGR APPLICATION WUMBER: 60/090636
REIGR REILGR DATE: 1998-06-25
REIGR APPLICATION WUMBER: 60/090636
REIGR REILGR DATE: 1998-06-25
REIGR REILGR DATE: 1998-06-26
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CURRENT FILING DATE: 2001-09-26
PRIOR APPLICATION NUMBER: 09/866,028
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Pred. No. 2.1e-172
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PRIOR FILING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091978
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/091982
PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/092182
PRIOR FILING DATE: 1998-07-09
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. Sequence 83, Application US/09944449

. Patent No. US20020102647A1

. GENERAL INFORMATION:
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Goddard, Audrey
Godowski, Paul
Grimaldi, Christopher
Gurney, Austin
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Conservative 0;
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Filvaroff, Ellen
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Tumas, Daniel
Wood, William
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Napier, Mary
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Best Local Similarity
Matches 431; Conserv
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                                                                                                                                                                                            Score 2211; DB 9;
Pred. No. 2.1e-172;
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PRIOR APPLICATION NUMBER: PCT/US01/06520
PRIOR FILING DATE: February 28, 2001
NUMBER OF SEQ ID NOS: 120
SEQ ID NO 83
LENGTH: 431
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Patent No. US20020103125A1
GENERAL INFORMATION:
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tive 0;
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Watanabe, Colin K.
Williams, P. Mickey
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Eaton, Dan L.
Ferrara, Napoleone
Fong, Sherman
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Roy, Margaret Ann
Stewart, Timothy
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Goddard, Audrey
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                                                                                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 431; Conservative
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Botstein, David
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                                                                                                         TYPE: PRT
; ORGANISM: Homo Sapien
US-09-944-449-83
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                                                                                         PRIOR FILING DATE: December 11, 1997
PRIOR FILING NUMBER: 60/669.358
PRIOR FILING NUMBER: 60/669.425
PRIOR FILING NATE: December 11, 1997
PRIOR FILING NATE: December 11, 1997
PRIOR FILING NATE: December 16, 1997
PRIOR FILING NATE: December 17, 1997
PRIOR FILING NATE: December 17, 1997
PRIOR FILING DATE: December 17, 1997
PRIOR FILING DATE: December 17, 1997
PRIOR FILING DATE: December 19, 1998
PRIOR APPLICATION NUMBER: 60/70, 440
PRIOR PRILING DATE: December 19, 1999
PRIOR PRILING DATE: December 19, 1999
PRIOR PRILING DATE: December 19, 1999
PRIOR PRILING DATE: DECEMBER: 60/10, 92
PRIOR PRILING DATE: DECEMBER: 60/10, 92
PRIOR PRILING DATE: DECEMBER: 60/10, 93
PRIOR PRILING DATE: POTULOS9/1330
PRIO
                                      FILING DATE: December 3, 1997
APPLICATION NUMBER: 60/069,334
                                                                                   FILING DATE: December 11, 1997
APPLICATION NUMBER: 60/069335
                      60/067,41
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APPLICATION NUMBER: 60/090540 FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090676
FILING DATE: 1998-06-25
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APPLICATION NUMBER: 60/090435
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FILING DATE: 1998-06-25
                                              FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/088876
FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/089105
FILING DATE: 1998-06-12
                                                                                                                                                                            APPLICATION NUMBER: 60/089440 FILING DATE: 1998-06-16 APPLICATION NUMBER: 60/089512
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APPLICATION NUMBER: 60/090444
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APPLICATION NUMBER: 60/090557
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APPLICATION NUMBER: 60/089514
FILING DATE: 1998-06-16
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FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/089599
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APPLICATION NUMBER: 60/089653
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APPLICATION NUMBER: 60/089907
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                        PLICATION NUMBER: 60/088861
LING DATE: 1998-06-11
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     PPLICANT: Zhang, Zemin
ITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITLE OF INVENTION: Acids Encoding the Same
ILE REFERENCE: P2730P1C70
                                                                    FILE REFERENCE: P2730PLC70
CURRENT APPLICATION NUMBER: US/09/989,731
CURRENT FILING DATE: 2001-11-20
PRIOR PLICATION NUMBER: 60/049787
PRIOR PLING DATE: 1997-06-16
PRIOR PILING DATE: 1997-10-17
PRIOR PILING DATE: 1997-11-12
PRIOR PILING DATE: 1997-11-12
PRIOR PILING DATE: 1997-11-13
PRIOR PILING DATE: 1997-11-13
PRIOR PILING DATE: 1997-11-24
PRIOR PILING DATE: 1997-11-24
PRIOR FILING DATE: 1997-11-24
PRIOR FILING DATE: 1997-11-24
PRIOR FILING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/06570
PRIOR FILING DATE: 1998-02-25
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FILING DATE: 1998-06-02
APPLICATION NUMBER: 60/087759
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FILING DATE: 1998-06-04
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FILING DATE: 1998-06-05
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FILING DATE: 1998-06-09
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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/084600
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PPLICATION NUMBER: 60/087106
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APPLICATION NUMBER: 60/087607
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FILING DATE: 1998-06-04
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APPLICATION NUMBER: 60/
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ICATION NUMBER: 60/
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APPLICANT: WOOD, WILLIAM
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
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CURRENT APPLICATION NUMBER: US/09/944,457

CURRENT PELING DATE: 2011-09-26

PRIOR PELICATION NUMBER: 09/666,028

PRIOR PLING DATE: 2001-05-25

PRIOR PLING DATE: December 3, 1997

PRIOR PLING DATE: December 11, 1997

PRIOR PELING DATE: December 12, 1997

PRIOR PELING DATE: December 13, 1997

PRIOR PELING DATE: December 16, 1997

PRIOR PELING DATE: December 17, 1998

PRIOR PELING DATE: December 17, 1998

PRIOR PELING DATE: December 17, 1998

PRIOR PELING DATE: CANUARY 9, 1998

PRIOR PELING DATE: CANUARY 9, 1998

PRIOR PELING DATE: CANUARY 8, 1999

PRIOR PELING DATE: December 16, 1998

PRIOR PELING DATE: December 16, 1998

PRIOR PELING DATE: December 17, 1998

PRIOR PELING DATE: December 16, 1998

PRIOR PELING DATE: December 17, 1998

PRIOR PELING DATE: December 16, 1998

PRIOR PELING DATE: December 16, 1998

PRIOR PELING DATE: DECEMBER: 09/254, 311

PRIOR PELING DATE: DA
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         Botstein, David
                                                                                                                                      Gerritsen, Mary
Goddard, Audrey
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Pred. No. 2.1
                                                 PRIOR FILING DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/090695
PRIOR APPLICATION NUMBER: 60/090695
PRIOR APPLICATION NUMBER: 60/090696
PRIOR PELING DATE: 1998-06-25
PRIOR PELING DATE: 1998-06-26
PRIOR FILING DATE: 1998-06-26
PRIOR FILING DATE: 1998-06-26
PRIOR APPLICATION NUMBER: 60/090863
PRIOR PELING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-02
PRIOR PELING DATE: 1998-07-07
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PRIOR FILING DATE: 1998-07-07
PRIOR APPLICATION NUMBER: 60/092182
PRIOR FILING DATE: 1998-07-09
FILING DATE: 1998-06-25
APPLICATION NUMBER: 60/090694
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Patent No. US20020110859A1
GENERAL INFORMATION:
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Best Local Similarity 100.
Matches 431; Conservative
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421 DYLINGIYVDI 431
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Grimaldi, Christopher
                                                                              Ferrara, Napoleone
Filvaroff, Ellen
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Goddard, Audrey
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Hillan, Kenneth
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Napier, Mary
Roy, Margaret
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100.0%; Score 2211; DB 9; Length 431;
Best Local Similarity 100.0%; Pred. No. 2.1e-172;
Matches 431; Conservative 0; Mismatches 0; Indels 0
PRIOR FILING DATE: No. US20020110859Alember 30, 1999
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: No. US20020110859Alember 30, 1999
PRIOR FILING DATE: No. US20020110859Alember 30, 1999
PRIOR FILING DATE: December1, 1999
PRIOR FILING DATE: December 16, 1999
PRIOR APPLICATION NUMBER: PCT/US90/03565
PRIOR FILING DATE: February 12, 2000
PRIOR APPLICATION NUMBER: PCT/US00/05841
PRIOR APPLICATION NUMBER: PCT/US00/05841
PRIOR APPLICATION NUMBER: PCT/US00/068439
PRIOR FILING DATE: March 2, 2000
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR FILING DATE: March 30, 2000
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR APPLICATION NUMBER: PCT/US00/32678
PRIOR FILING DATE: March 30, 2000
PRIOR APPLICATION NUMBER: PCT/US00/32678
PRIOR FILING DATE: DECEMBER: PCT/US00/32678
PRIOR FILING DATE: DECEMBER: PCT/US00/32678
PRIOR FILING DATE: DECEMBER: PCT/US00/3620
PRIOR APPLICATION NUMBER: PCT/US00/3620
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US-09-944-862-83
; Sequence 83, Application US/09944862
; Patent No. US20020115145A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin
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                                                   Desnoyers, Luc
Eaton, Dan L.
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                                                                                                             Fong, Sherman
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FILING DATE: No. US20020115145Alember 30, 1999
APPLICATION NUMBER: PCT/US99/28313
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2.1e-172;
      PRIOR FILLING DATE: NO. USCAUCALLIA-CALLED PRIOR FILLING DATE: NO. USCAUCALLIA-CALLED PRIOR PRICING PAPELICATION NUMBER: PCT/US99/283101

PRIOR PLILING DATE: December 1, 1999

PRIOR PLILING DATE: December 16, 1999

PRIOR PLILING DATE: December 16, 1999

PRIOR PLILING DATE: December 16, 1999

PRIOR FILLING DATE: PEDRUARY 11, 2000

PRIOR PLILING DATE: FEBRUARY 21, 2000

PRIOR PLILING DATE: FEBRUARY 22, 2000

PRIOR PLILING DATE: PEDRUARY 22, 2000

PRIOR PLILING DATE: MARCH 2, 2000

PRIOR PLILING DATE: MARCH 30, 2000

PRIOR PLILING DATE: MAY 22, 2000

PRIOR PLILING DATE: DECEMBER: PCT/US00/20710

PRIOR PLILING DATE: DECEMBER: PCT/US00/32678

PRIOR PLILING DATE: DECEMBER: PCT/US01/06520

PRIOR PLILING DATE: PEDRUARY 28, 2001

PRIOR PLILING DATE: PEDRUARY 28, 2001

NUMBER OF SEQ ID NOS: 120

SEQ ID NO 83

LENGTH: A31
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;; Pred. No. 2.16
0; Mismatches
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Best Local Similarity 100.0%;
Matches 431; Conservative 0
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Sequence 515, Application US/09989732 Patent No. US20020123463A1 GENERAL INFORMATION: APPLICANT: Ashkenazi, Avi J.

US-09-989-732-515

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A MATICANT: BESSEALLAND LICE
A PELICANT: RECONDENSE LICE ASSESSED LICE A
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R FILING DATE: 1998-06-10
R APPLICATION NUMBER: 60/088810
R APPLICATION NUMBER: 60/088826
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R APPLICATION NUMBER: 60/08858
R FILING DATE: 1998-06-11
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                                                                                                     R TELING DATE: 1998-06-05
R APPLICATION NUMBER: 60/088217
R FILING DATE: 1998-06-05
R PILING DATE: 1998-06-05
R PILING DATE: 1998-06-09
R APPLICATION NUMBER: 60/088734
R FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/090429
FILING DATE: 1998-06-24
FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
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APPLICATION NUMBER: 60/089514
ALLING DATE: 1998-06-16
APPLICATION NUMBER: 60/089532
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FILING DATE: 1998-06-19
APPLICATION NUMBER: 60/090246
FILING DATE: 1998-06-22
ING DATE: 1998-06-05
LICATION NUMBER: 60/088202
ING DATE: 1998-06-05
LICATION NUMBER: 60/088212
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LLING DATE: 1998-06-17
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APPLICATION NUMBER: 60/090349
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APPLICATION NUMBER: 60/08876
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APPLICATION NUMBER: 60/089105
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APPLICATION NUMBER: 60/089538
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ICATION NUMBER: 60/089598
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FILING DATE: 1998-06-17
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FILING DATE: 1998-06-17
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ING DATE: 1998-06-18
LICATION NUMBER: 60/089907
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APPLICATION NUMBER: 60/089908
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ICATION NUMBER: 60/089947
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OR FILING DATE: 1998-06-24
OR APPLICATION NUMBER: 60/090557
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OR APPLICATION NUMBER: 60/090676
OR FILING DATE: 1998-06-25
OR APPLICATION NUMBER: 60/090678
OR FILING DATE: 1998-06-25
OR APPLICATION NUMBER: 60/090678 PRIOR APPLICATION NUMBER: 60/091360
PRIOR FILING DATE: 1998-00-01
PRIOR FILING DATE: 1998-07-01
PRIOR PEDING DATE: 1998-07-02
PRIOR PELING DATE: 1998-07-02
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PRIOR FILING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-01
PRIOR APPLICATION NUMBER: 60/091519
PRIOR PELING DATE: 1998-07-02
PRIOR APPLICATION NUMBER: 60/091626
PRIOR PELING DATE: 1998-07-02
PRIOR PELING DATE: 1998-07-02
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Gaps ; 0 Length 431; Indels Query Match 100.0%; Score 2211; DB 9; Best Local Similarity 100.0%; Pred. No. 2.1e-172; Matches 431; Conservative 0; Mismatches 0; 1 MFFGGEGSLTYTLVIICFLTLRLSASONCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ

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120 180 9 1 MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ EDCINSCCSTKNISGDKACNLMIFDTRKTAROPNCYLFFCPNEEACPLKPAKGLMSYRII 61 EDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRII TDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSD 61 121 ò ò

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APPLICATION NUMBER: 60/088021
FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088025
FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088026
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FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088033
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APPLICATION NUMBER: 60/089105
FILING DATE: 1998-06-12
APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
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APPLICATION NUMBER: 60/088029
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APPLICATION NUMBER: 60/088326
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FILING DATE: 1998-06-05
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FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/088876
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APPLICATION NUMBER: 60/088734
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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088824
FILING DATE: 1998-06-10
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FILING DATE: 1998-06-11
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FILING DATE: 1998-06-16
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FILING DATE: 1998-06-16
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FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/089907
FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/089908
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                                                                                    301 AVLTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTWNKTASWEGR
                                                                                                                                                        EASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRL
                                                   301 AVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGR
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
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CURRENT APPLICATION NUMBER: US/09/991,073
CURRENT FILING DATE: 2001-11-14
PRIOR PELING DATE: 2001-11-14
PRIOR PELLING DATE: 1997-06-16
PRIOR PELLING DATE: 1997-06-16
PRIOR PELLING DATE: 1997-10-17
PRIOR PELLING DATE: 1997-10-17
PRIOR PELLING DATE: 1997-11-12
PRIOR PELLING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065311
PRIOR PELLING DATE: 1997-11-13
PRIOR PELLING DATE: 1997-11-14
PRIOR PELLING DATE: 1997-11-24
PRIOR PELLING DATE: 1997-11-24
PRIOR PELLING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/078910
PRIOR PELLING DATE: 1998-03-20
PRIOR PELLING DATE: 1998-03-20
PRIOR PELLING DATE: 1998-03-20
PRIOR PELLING DATE: 1998-05-07
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Patent No. US20020127576A1
GENERAL INFORMATION:
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Stewart, Timothy A.
Tumas, Daniel
Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
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Goddard, Audrey
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Kljavin, Ivar J.
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APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
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FILLING DATE: 1998-06-25
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FILING DATE: 1998-07-01
APPLICATION NUMBER: 60/091519
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APPLICATION NUMBER: 60/092182
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APPLICATION NUMBER: 60/090445
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FILING DATE: 1998-06-26
APPLICATION NUMBER: 60/091360
            APPLICATION NUMBER: 60/089947
FILING DATE: 1998-06-19
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APPLICATION NUMBER: 60/090355
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FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090540
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PLICATION NUMBER: 60/090542
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FILING DATE: 1998-06-25
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FILING DATE: 1998-06-26
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PPLICATION NUMBER: 60/090557
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APPLICATION NUMBER: 60/090254
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CURRENT APPLICATION NUMBER: US/09/945,587
CURRENT FILING DATE: 2001-09-26
RIOR APPLICATION NUMBER: 09/866,028
RRIOR PILING DATE: 2001-06-25
RRIOR PELING DATE: 20067,411
PRIOR FILING DATE: December 3, 1997
PRIOR FILING DATE: December 1, 1997
PRIOR FILING DATE: December 11, 1997
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PRIOR FILING DATE: December 11, 1997
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APPLICATION UNDBER: 60/069,278
FILING DATE: December 11, 1997
APPLICATION NUMBER: 60/069,425
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Filvaroff, Ellen
  Best Local Similarity 100.
Matches 431; Conservative
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APPLICANT: Botstein, David
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Tumas, Daniel
Wood, William
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PRIOR FILING DATE. December 16, 1997
PRIOR PELLOR PRELICATION NUMBER: 60/169, 970
PRIOR PELLOR PAPEL CATION NUMBER: 60/169, 970
PRIOR PELLOR DATE. DECEMBER 16, 1997
PRIOR PELLOR DATE. DECEMBER 16, 1997
PRIOR PELLOR DATE. DECEMBER 11, 1997
PRIOR PELLOR DATE. DECEMBER 19, 1998
PRIOR PELLOR DATE. DECEMBER 16, 0704, 008
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ORGANISM: Homo Sapien
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                                                                                    1 MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQ
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
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                    Indels
  100.0%; Pred. No. 2.1e-172;
tive 0; Mismatches 0;
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CURRENT FILING DATE: 2001-11-14
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; Sequence 515, Application US/09990442
; Patent No. US20020132252A1
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PRIOR APPLICATION NUMBER: 60/09787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
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Gurney, Austin L.
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Williams, P. Mickey
Wood, William I.
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Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
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Best Local Similarity 100.
Matches 431; Conservative
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Eaton, Dan L.
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Tumas, Daniel
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PRIOR APPLICATION NUMBER: 60/089512
PRIOR FILING DATE: 1998-06-16
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PRIOR PLING DATE: 1998-06-25
PRIOR APPLICATION NUMBER: 60/090618
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Secreted and Transmembrane Polypeptides and Nucleic Acids Encoding the Same
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TITLE OF INVENTION: Secreted and Transmembran
PRIOR PELICATION NUMBER: 60/06250
PRIOR PELING DATE: 1997-06-16
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
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PRIOR FILING DATE: 1998-04-26
PRIOR FILING DATE: 1998-05-07
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        Grimaldi, J. Christopher
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Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
                                                                                                                                                                       Roy, Margaret Ann
Stewart, Timothy A
                                                                                                                                          Paoni, Nicholas F.
                                     Gurney, Austin L.
Kljavin, Ivar J.
                                                                                         Napier, Mary A.
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Patent No. US20020132253A1
GENERAL INFORMATION
APPLICANT: Baker, Kevin P.
APPLICANT: Baker, Kevin P.
APPLICANT: Betein, David
APPLICANT: Eaton, Dan L.
APPLICANT: Faton, Dan L.
APPLICANT: Fong, Sherman
APPLICANT: Gerber, Hanspeter
                                              PRIOR FILING DATE: 1998-07-01
PRIOR APPLICATION NUMBER: 60/091478
PRIOR APPLICATION NUMBER: 60/091478
PRIOR FILING DATE: 1998-07-01
PRIOR FILING DATE: 1998-07-01
PRIOR PELING DATE: 1998-07-02
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PRIOR PELING DATE: 1998-07-07
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APPLICATION NUMBER: 60/091360
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Goddard, Audrey
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PRIOR APPLICATION NUMBER: 09/216,021
PRIOR FILING DATE: December 16, 1998
PRIOR APPLICATION NUMBER: 09/254,311
PRIOR APPLICATION NUMBER: 09/254,311
PRIOR APPLICATION NUMBER: 09/254,311
PRIOR APPLICATION NUMBER: PCT/US99/2252
PRIOR APPLICATION NUMBER: PCT/US99/28409
PRIOR FILING DATE: March 3, 1999
PRIOR FILING DATE: September 15, 1999
PRIOR FILING DATE: September 15, 1999
PRIOR PRILING DATE: No. US20020132768Alember 30, 1999
PRIOR PILING DATE: December 1, 1999
PRIOR PILING DATE: December 1, 2000
PRIOR PILING DATE: PEDTUARY 21, 2000
PRIOR PILING DATE: PEDTUARY 22, 2000
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PRIOR PELING DATE: MAY 28, 2000
PRIOR PELING DATE: MAY 28, 2000
PRIOR PELING DATE: PEDTUARY 28, 2001
NUMBER OF SEQ ID NOS: 120
SEQ ID NO 83
PUBLICATION NUMBER: PCT/US01/06520
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; ORGANISM: Homo Sapien
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: PLOSABELLO
CURRENT PAPLICATION NUMBER: 05/96,028
PRIOR APPLICATION NUMBER: 00/966,028
PRIOR APPLICATION NUMBER: 06/067,411
PRIOR FILING DATE: 2001-05-25
PRIOR FILING DATE: 2001-05-25
PRIOR FILING DATE: December 11, 1997
PRIOR FILING DATE: December 16, 1997
PRIOR FILING DATE: December 18, 1997
PRIOR FILING DATE: December 16, 1997
PRIOR FILING DATE: December 17, 1997
PRIOR FILING DATE: PEDIUARY 9, 1998
PRIOR PRILING DATE: PEDIUARY 9, 1998
PRIOR PRILING DATE: PEDIUARY 9, 1998
PRIOR PRILING DATE: PEDIUARY 9, 1999
                                                                                                                                                                                                                      Sequence 83, Application US/09945015 Patent No. US20020132768A1
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Gurney, Austin
Hillan, Kenneth
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                                              421 DYLINGIYVDI 431
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APPLICANT: Botstein, David
            DYLINGIYVDI 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: P2548P1C1
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                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                              RESULT 15
US-09-945-015-83
         421
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APPLICANT:
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Search completed: April 26, 2005, 22:25:34 Job time : 1467 secs

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OM protein - protein search, using sw model

Run on:

April 26, 2005, 21:38:57 ; Search time 52 Seconds (without alignments) 797.489 Million cell updates/sec

US-10-735-014-83 2211 Title: Perfect score:

1 MFFGGEGSLTYTLVIICFLT......LRRKRYSRLDYLINGIYVDI 431

Scoring table: Sequence:

283416 segs, 96216763 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched:

Total number of hits satisfying chosen parameters:

283416

DB seq length: 0 DB seq length: 200000000 Minimum I Maximum I

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		di			SUMMARIES	
Result No.	Score	Query Match	Length	DB	ID	Description
1	174.5	7.9	825	7	T29634	hypothetical prote
8		7.3	477	~	S53362 Î	_
ო	55		770	~	T22808	73
4	154.5		851	N	T22696	
Ŋ	154	7.0	534	~	T39903	Ω
9		6.9	1251	~	T21389	`~
7	150.5	6.8	797	<del>, -1</del>	VGBEX1	glycoprotein X pre
œ	150.5	6.8	860	~	JC4566	
6	149.5	•	3020	~	A43932	mucin 2 precursor,
10	149.5	6.8	3570	7	T45025	mucin MUČ5B, trach
11	147.5	6.7	790	~	T34293	hypothetical prote
12	147.5	6.7	1609	7	S25345	-4
13	147	9.9	662	7	A45155	mucin FIM-C.1 - Af
14	146	9.9	786	ч	A47547	serine proteinease
15	144.5	6.5	505	N	B46629	mucin 6, gastric (
16	144.5	6.5	1104	~	S59310	able
17	143	6.5	626	8	S53871	Pmel 17 protein -
18	142.5	6.4	377	~	A48018	mucin 7 precursor,
19	142.5	6.4		7	A49179	melanoma antigen h
20	42	6.4		~	T45462	membrane glycoprot
21	N	6.4	867	7	T45463	membrane glycoprot
22	41	6.4	1161	~	S57180	probable membrane
23	141	6.4	1777	7	T34369	hypothetical prote
24	. 140	6.3	292	~	S24169	
25	140	•	1275	7	T33369	hypothetical prote
56	138	6.2	606	-	QRXLL2	
27	137.5	6.2	1630	~	A53577	g
28	137	6.2	528	~	147141	gastric mucin (clo
29	136.5	6.2	1229	~	T25697	hypothetical prote

probable membrane hypothetical prote	mucin JUL7 - human hypothetical prote	hypothetical prote mucin 5AC - human hypothetical prote	hypothetical prote probable membrane	mucin JER57 - huma probable membrane	flocculation prote hypothetical prote	exo-alpha-sialidas a-agglutinin core
S63257 T21460 A53715	S35047 T47182	F90073 153641 T19474	T34513 S51892	S35049 S63131	S48992 S51959	JH0557 A41258
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136	135.5	133.5 133.5	133.5	133	133 133	132
30 31	1 W W C	3 B B	. æ 6 . e e	4 4 1 1 1 1	4 4 2 2	44 45

## ALIGNMENTS

RESULT T29634

hypothet C;Specie C;Date:	hypothetical protein C12D12.1 - Caenorhabditis elegans C.Species: Caenorhabditis elegans C.Species: Deot.1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
R;Nhan, submitte	N.Man, Hawkins, J. Submitted to the EMBL Data Library, March 1996 A.Description: The sequence of C. elegans cosmid C12D12.
A; Access	A;Reference number: Z20656 A;Accession: T29634
A;Status A;Molecu	A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA
A;Residu A;Cross-	A;Residues: 1-825 <nha> A;Cross-references: UNIPROT:Q17921; EMBL:U51998; PIDN:AAA96080.1; GSPDB:GN00028; CESP:C</nha>
A; Experimen C; Genetics:	mental source: strain Bristol N2; clone C12D12 C8:
A; Gene:	A;Gene: CBSP:C12D12.1
A, Intron C, Superf	A;introns: 48/1; 86/3; 137/1; 172/3; 224/3; 253/1; 287/3; 328/2; 454/1; 487/3; 692/1 C;Superfamily: Epstein-Barr virus membrane antigen gp350
Query Best L	Query Match 7.9%; Score 174.5; DB 2; Length 825; Best Local Similarity 23.7%: Pred. No. 0.00064;
Matche	s 93; Conservative 40; Mismatches 144; Indels 115; Gaps 17;
ò	52 NEPVYTSTQEDCINSCCSTKNISGDKACNLMIFDTRK
qq	363 NTPFFTRNANDTIEIYCTVLSCSSITIDGVKIQITDTKVVQKVDDISYYIFVNTIAN 419
ó	89TARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDF 123
qq	420 PGYHQISLKQQGSYAFFVYGKNKLYSYGYEGGANKPTVVLAPPITPGPTFYPVTTVSTMS 479
à	124 PSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLE 183
Db	480 PPTTVTVPTTPTPVPTTTNTPPANPTTATPTTVGTSKQTNTISPHLS 526
ò	184 KLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPH 236
qq	527 TITGSIVTSTPTWAPQTSASPTTTPTHTTASQPTTTKPVVTTNSVTPSTGTTTVPVP- 583

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TISATPKPATLLPINASVIPSGTSQPQLATTAPPVITVTSQPPTTLISTVFTRAAATLQA 296

237

639 TITVVPSSATVPTTPPTTVTVAATTTSKAPVVTTSPTLAPTSPTKLPTSPBSTVGTSP-T 697

324 EISNLTLNTGNVYNPTALSMSNVESSTMNKTA 355

297 MAT-----PIDSKGSLETIPFT 323

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329

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A;Cross-references: UNIPROT:Q20908; EMBL:Z74473; PIDN:CAA98949.1; GSPDB:GN00023; CESP:F5
A;Experimental source: clone F56H9
C;Genetics:
A;Gene:CSP:F56H9.1
A;Map position: 5
A;Introns: 235/1; 262/2; 320/1; 367/2; 510/3; 654/1; 681/2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151 TSTTTTTVPPTTTSTTTTTTVPAT----TTSTATTTTVPPTTSTTTTTVPPTTTSTTT 205
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C;Species: Schizosaccharomyces pombe
C;Species: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
C;Accession: T39903
R;Lyne, M.; Rajandream, M.A.; Barrell, B.G.; Rieger, M.
submitted to the EMBL Data Library, November 1998
A;Reference number: 221889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---NLTLNTGNVYNPTALSMSNVESSTWNKTASWEGREASPGSSSQGSVPENQYGLP 380
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22696
R;Ainscough, R.
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                                                                                                                                                                                                                                                                                                                                                                  7.0%; Score 155.5; DB 2;
llarity 32.7%; Pred. No. 0.011;
Conservative 16; Mismatches 64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted to the EMBL Data Library, December 1996
A;Reference number: Z19601
A;Accession: T22696
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-851 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A,Introns: 49/3; 123/3; 226/1; 282/3; 669/3; 743/3
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                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 48; Conserv
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                                                                                                                                                                                                                                      mucin State: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C; Species: Homo sapiens (man)
C; Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
R; Gayonnet-Duperat, V.; Audie, J.P.; Debailleul, V.; Laine, A.; Buisine, M.P.; Galiegue-Biochem. J. 305, 211-219, 1995
A; Reference number: S53361; MUDD:95126907; PMID:7826332
A; Rocession: S53361; MUDD:95126907; PMID:7826332
A; Rocession: S53361; MUDD:95126907; PMID:7826332
A; Rocession: S7306
A; Residues: 1-477 < CdTy>
A; Experimental source: clone JER47
A; Residues: 1-11, S7, 213-224, AR', 227-259, S', 261-477 < POR>
A; Rosidues: L-11, S7, 213-224, AR', 227-259, S', 261-477 < POR>
A; Rocession: S71065
A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHPEVSIEHLGQVVQCSREEGLVCRNQDQQGPFKMCLNYEVRVLCCETPKGCPVT---ST 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STVFTRAAATLQAMATTAVLTTTFQAPTDSKGSLET-------IPFTEISNLTL 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | :| | :: | | :: | | SAPTISTISAPISSIISAPITSIISAPITSTISAI- 250
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251 TISTISAPTISTISTPQISKISAAISSTISGSGITPSPVITISTASVSKISISHVSVSKT 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190 ---EASAQLLAY-----KEKG-----HSQSSQFSS--DQEIAHLLPENVSALPATVAVAS 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----VTPSGTSQPQLATTAPPVTTVTSQPPTTLI 283
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
T122808
T122808
C;5808
C;58cies: Caenorhabditis elegans
C;59cies: 15-Oct-1999 #text_change 09-Jul-2004
C;Accesion: T22808
R;Burton, J.
submitted to the EMBL Data Library, June 1996
A;Reference number: Z19618
A;Accession: T22808
A;Status: preliminary, translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7.3%; Score 160.5; DB 2; Length 23.8%; Pred. No. 0.0028; tive 41; Mismatches 117; Indels
698 APANLTTPTTAPVNPT -- SSTTAPTAPVNPTS 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gene: GDB:MUCSAC
A;Cross-references: GDB:454136; OMIM:158373
A;Map posttion: 11p15.5-11p15.5
C;Keywords: glycoprotein; tandem repeat
                                                                                                                                                                                                                mucin 5AC (clone JER47) - human (fragment)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 23.8 hes 76; Conservative
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A; MCCecule type: DNA
A; Residues: 1-797 <TEL.
A; Residues: 1-797 <TEL.
A; Residues: 1-797 <TEL.
A; Cross-references: UNIPROT: P28968; GB: M86664; NID: G330791; PIDN: AAB02506.1; PID: G33086
A; Cross-references: UNIPROT: P28968; GB: M86664; NID: G330791; PIDN: AAB02506.1; PID: G33086
A; Title: The DNA sequence of equine herpesvirus-1.
A; Reference number: A41831; MUID: 92295566; PMID: 1318606
A; Contents: annotation; possible protein-coding frames
A; Note: neither amino acid nor nucleotide sequence is given
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Superfamily: equine herpesvirus glycoprotein X; equine herpesvirus 1 glycoprotein hom
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                                                                                                 283
                                                                                                                                                                     164 TDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENV 223
                                                                                                                                                                                                                                                                                                                    ------VQKTRTSEDKPSSSTTVPTSASTSESSTSSP-WAETSSSSTTSQSSPAST-- 314
                                                                                                                                                                                                                                                                                                                                                                                            284 STVFTRABATLQAMATTAV--LTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTAL 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                  315 STV--PESSTVGSTPTTGLTTLSTNEOSTSTSSGGHSTSTFGTTSE-TPETSTDFTATST 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       217
     142 DGKQTNLRYNGGCCSETSIQVLNSSDS--TRWILTTSDSWNKANALINLLYCTPN--ACP 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 SAPSTASSTISIPISISIETITITIPIASTITIPIAPITIAAPITAATITAVITAASISAETIT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149 ATATATSTETTTTPTSTTTTTATTTVETTASTTTDTTTTAATTTAATTTAATTTAA 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGREASPGSSSQGS 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein X precursor - equine herpesvirus 1 (strain Ab4p)
Clypecies: equine herpesvirus 1
A,Note: host Equus caballus (domestic horse)
C,Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 09-Jul-2004
C,Accession: H66802
R,Telford, EA.R.; Watson, M.S.; McBride, K.; Davison, A.J.
R,Davison: The DNA sequence of equine herpesvirus-1.
                                                              108 LKPAKGLMSYRIITDFPSLT----RNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDYSKP
                                                                                                                                                                                                                                                                                     224 SALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       158 TDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        342 S-----MSNVESSTMNKTASWEGREASPGSSSQGSVPENQYGLPF--EKWLL 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 797;
                                                                                                                                                                                                                              218 LLPENVSALPATVAVASPHTTSATPKPATLLPTNASVTP------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
6.8%; Score 150.5; DB 1; Length 7
Best Local Similarity 24.3%; Pred. No. 0.025;
Matches 58; Conservative 25; Mismatches 131; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; Keywords: glycoprotein; transmembrane protein
F;1-2-70-Domain: slgnal sequence #status predicted <SIG>
F;23-797/Product: glycoprotein X #status predicted <MAT>
F;23-465/Region: serine/threonine-rich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;590/Binding site: carbohydrate (Asn)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Reference number: A36805
                                                                                                                                                                                                                              257 ME---
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A)Recession: 721389
A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: DNA
A,Residuss: 1-1251 <WIL>
A,Residuss: 1-1251 <WIL>
A,Esperimental source: clone F26C11
C,Genetics:
C,Genetics:
A,Map position: 2
A,Map position: 2
                                                                          A.Cross-references: UNIPROT:094317; EMBL:AL033534; PIDN:CAA22127.1; GSPDB:GN00067; SPDB:A.Experimental source: strain 972h-; cosmid c215
A.GenetisspB:SPBC215.13
A.Map position: 2
C.Superfamily: pig submaxillary mucin
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A;Introns: 24/1; 111/1; 208/1; 272/1; 380/1; 394/3; 485/3; 586/3; 630/3; 669/3; 713/3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----NSCCSTKNI----SGDKACNLMIFDTRKTARQPNCY--LFFC-PNEEACP 107
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C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T21889
                                                                                                                                                                                                                                                                                                                                                                                                                                 ETGGTPTYYGYATPTSSSEPSIFSESATPSETNSYSSPVSSYSDPATSQLPSSTSFFSPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         154 AHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQ
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                                                                                                                                                                                                                                                                                                                                                                                         9 LTYTLVII------CFLTLRLSASQNCLKKSLEDVV-IDIQSSLSK--GIR-----
                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                        90;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSFSSTTSSSKSSSFSSTVSSSSSTTSSSSSSRPASSSHS 400
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              327 NLTLNT-----GNVYNPTALSMSNVESSTMNKTASWEGREASPGSSS
                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                                                                            Query Match 7.0%; Score 154; DB 2; L. Best Local Similarity 21.1%; Pred. No. 0.0087; Matches 86; Conservative 79; Mismatches 183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46; Mismatches 161;
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-534 <LYN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 6.9%; Score 151.5; DB Best Local Similarity 22.4%; Pred. No. 0.037; Matches 93; Conservative 46; Mismatches 1
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Y.S.

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,Note: sequence extracted from NCBI backbone (NCBIP:116698)
,Toribara, N.W.; Gum Jr., J.R.; Culhane, P.J.; Lagace, R.E.; Hicks, J.W.; Petersen, G.M.; Clin. Invest. 88, 1005-1013, 1991
,Title: MUC-2 human small intestinal mucin gene structure. Repeated arrays and polymorp, Reference number: A43932; MUID:91388717; PMID:1885763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Molecule type: DNA
, Residues: 1343-1350, L., 1352-1411, 'S', 1413-1448, 'P', 1450-1503, 'T', 1505-1915 < TOR>
, Residues: 1343-1350, L., 1352-1411, 'S', 1413-1448, 'P', 1450-1503, 'T', 1505-1915 < TOR>
, Residues: 1343-1350, L., 1352-1411, 'S', 1413-1448, 'P', 1450-1503, 'T', 1505-1915 < TOR>
, Note: sequence inconsistent with the nucleotide translation
, Note: sequence extracted from NCBI backbone (NCBIN:55749, NCBIP:55750)
, Gum, J.R.; Byrd, J.C.; Hicks, J.W.; Toribara, N.W.; Lamport, D.T.A.; Kim, Y.S.

= 15101. Chem. 264, 6480-6487, 1989
, Title: Molecular cloning of human intestinal mucin cDNAs. Sequence analysis and eviden interence number: A33532; MUID:89197956; PMID:2703501
                                                                    Title: The human MTC2 intestinal mucin has cysteine-rich subdomains located both upstr; Reference number: A45106; MUID:93016075; PMID:1400449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Molecule type: mRNA

'Breaidues' Tr', 1925-1948,'TTS', 1952-1954 <JAN>

'Breaidues' Tr', 1925-1948,'TTS', 1952-1954 <JAN>

'Rosidues' Tr', 1925-1948,'TTS', 1952-1954 <JAN>

'Xu, G', Huan, L', Khatri, I.; Sajjan, U.S.; McCool, D.; Wang, D.; Jones, C.; Forstner,

'Xu, G', Huan, L', Khatri, I.; Sajjan, U.S.; McCool, D.; Wang, D.; Jones, C.; Forstner,

'Tatle: Huan intestinal mucin-like protein (MLP) is homologous with rat MLP in the C-t

'Reference number: PQ0328; MUID:92198477; PMID:1550588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Map position: 11p15.5-11p15.5
C;Suberfamily: von Willebrand factor; von Willebrand factor type A repeat homology; von C;Reywords: glycoprotein; intestine; tandem repeat
E;2766-2834/Domain: von Willebrand factor type C repeat homology <VWC>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Gum Jr., J.R.; Hicks, J.W.; Toribara, N.W.; Rothe, E.M.; Lagace, R.E.; Kim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PENVSALPATVAVASPHTTSATPKPATL--LPTNASVTP--SGTSQPQLATTAPPVTTVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jany, B.H.; Gallup, M.W.; Yan, P.S.; Gum, J.R.; Kim, Y.S.; Basbaum, C.B. Clin. Invest. 87, 77-82, 1991
Title: Human bronchus and incestine express the same mucin gene. Reference number: A61257; MUID:91086481; PMID:1985113
                                                                                                                                                                                                                                 i,Molecule type: mRNA
;Residues: 626-1895 <GU2>
;Residues: 626-1895 <GU2>
;Across-references: GB:M94131; NID:g186395; PIDN:AAA59163.1; PID:g186396
;Note: sequence extracted from NCBI backbone (NCBIP:116706)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Residues: 2037-3020 <GU3>
;Cross-references: GB:M94132; NID:g186397; PIDN:AAA59164.1; PID:g186398
;Experimental source: colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecule type: mRNA
;Residues: 1916-2193 -GGU4>
;Residues: 1916-2193 -GGU4>
;Reserver = GB:MZ2405; NID:gl88873; PIDN:AAA36334.1; PID:gl88874
;Reperimental source: intestine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 3020;
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ilarity 34.1%; Pred. No. 0.15;
Conservative 12; Mismatches
                                                                                                                                                                                             A;Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                               Status: not compared with conceptual translation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 2328-2342,'K',2344-2354 <XUG1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Cross-references: GB:M86523;Experimental source: small intestine
                                        . Biol. Chem. 267, 21375-21383, 1992;Title: The human MUC2 intestinal muc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Molecule type: mRNA
Residues: 2328-2468 <XUG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 43; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Molecule type: mRNA
                                                                                                                                                             Accession: A45106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: B33532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Accession: PQ0329
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genetics:
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                                                                                                                                                     chitinase (EC 3.2.1.14) 2 precursor - Coccidioides immitis
chitinase (EC 3.2.1.14) 2 precursor - Coccidioides immitis
NyAlternate names: chitin hydrolase homolog; CTS2 protein
C;Species: Coccidioides immitis
C;Date: 12-Mar-1996 #sequence_revision 19-Apr-1996 #text_change 13-Nov-1998
C;Accession: JC4566
R;Pishko, E.J.; Kirkland, T.N.; Cole, G.T.
Gene 167, 173-177, 1995
A;Title: Isolation and characterization of two chitinase-encoding genes (cts1, cts2)
A;Reference number: JC4565; MUID:96144270; PMID:88566773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οĘ
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A43932
Mucin 2 precursor, intestinal - human (fragments)
Milternate names: mucin SMUC-41
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: A49963; A45106; B45106; A43932; B33532; A61257; PQ0328; R;Gum Jr., J.R.; Hicks, J.W.; Toribara, N.W.; Siddiki, B.; Kim, Y.S.
J. Biol. Chem. 269, 2440-2446, 1994
A;Title: Molecular cloning of human intestinal mucin (MUC2) cDNA. Identification cA;Reference number: A49963; MuID:94132002; PMID:8300571
A;Accession: A49963
A;Molecule type: mRNA
A;Residues: 1-639 <GUI.>
A;Cross-references: UNIPROT:Q02817; UNIPROT:Q14884; GB:L21998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65 NSCCSTKN-ISGDKACNLMIFDTRKTARQ---PNCYLFFCPNEEACPLKPAKGLMSYRII 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 TDFPSLTRNLPSQE--LPQEDSLLHGQFSQAV-TPLAHHHTDYSKPTDISWRDTLSQ--K 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 176 FGSSDHL----EKLFKMD---EASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPA 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          324 LGGLPYADIMKEVLLRCDPDPPTSTVTSTTSASTSTQTSSQSTTMETKTLSASTTPSSPS 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RAAA----TLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMS 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441 RSASTETVITRSQEPPSTISTWSASTETSTSSQDSPSTTISTKSAPTG-----TVTTRS 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----GLPASKSAAAKEDYLIPGEATKIVSTYMAKYPSTFGGM--MVWEATASENNK 323
        Ajintrons: 35/3; 181/2
C;Keywords: glycoprotein; glycosidase; hydrolase; polysaccharide degradation
F;1-22/Domain: signal sequence #status predicted <SIG>
F;22-239/Domain: catalytic #status predicted <CAT>
F;23-860/Product: chitinase 2 #status predicted <MAT>
F;63-860/Region: exrine/Lhreonine-rich
F;69-860/Region: cysteine-rich
F;99-860/Region: cysteine-rich
F;90,657/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2; Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               235 NPSCSAKRWVTNPKSVTYTVDDWVKYIRKSGNPLAKLFI---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.8%; Score 150.5; DB 2;
23.9%; Pred. No. 0.027;
tive 49; Mismatches 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ODLPSTTISTRSPETETETATTKSÓGS 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345 NVESSTMNKTASWEGREASPGSSSOGS 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 23.9
Matches 78; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: mRNA
A;Residues: 1-860 <PIS>
A;Cross-references: GB:L41662
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: JC4566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          229
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275

Gaps

Qy 276 SQPPTILISTVFTRAAATLQAMATTAVLTTFQAPTDSKGSLETIPFT 323  bb 1571 TPPPTITPSPPTITTPPPPTTTPPPPTTTPSPPTTTTTTPPPTTTPPPTTTPIT 1627	152	PLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSS 207
Oy 324 EISNLT 329 ::   ::   Db 1628 PPTSTT 1633	Oy 208 OFSSDOR 1:	PEGFHUKFESK-KULGLPEGFQVGGSQIKFIEKKQGFALLELKKNSIVPF11S1 589  QFSSDQEIAHLLPENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATT 267    :-
RESULT 10 T45025 mucin MUC5B, tracheobronchial [imported] - human (fragment) C;Species: Homo sapiens (man)	268	
C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 21-Jul-2000 C;Accession: T45025 R;Desseyn, J.L.; Guyonnet-Duperat, V.; Porchet, N.; Aubert, J.P.; Laine, A.	Qy 323 TEISNLS : : 704 WQ	323 TEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGREASPGSSSQGSVPENQ 376 :
July 1. Chem. 272, 3168-3184, 1997  A, Title: Human mucin gene MUCSB, the 10.7 kb large central exon encodes various alternat A, Title: Human mucin gene MUCSB, the 10.7 kb large central exon encodes various alternat A, Reference number: 222899, MUID: 97166151; PMID: 9013550  A, Recession: T45025  A, Status: preliminary; translated from GB/BMBL/DDBJ  A, Molecule type: DNA  A, Residues: 1.3570 < DES> A, Cross-references: EMBL: Z72496; NID: 91834502; PIDN: CAA96577.1; PID: 91834503  A, Experimental source: placenta C, Genetics: C, Genetics:	RESULT 12 \$25.85 probable membrane probable membrane probable membrane by C; Species: Saccharomy C; Date: 30. Sep-1993 f C; Accession: S25345; R; Wilson, C; Grisant vaser R 56.57; 100.	RESULT 12 S2534 S2534 S25345 probable membrane protein YCR089w - yeast (Saccharomyces cerevisiae) N;Alternate names: hypothetical protein YCR1102 C;Species: Saccharomyces cerevisiae C;Species: Saccharomyces cerevisiae C;Accession: S25345; 819504 C;Accession: S25345; 819504 R;Willson, C.; Grisanti, P.; Frontali, L. Vaaet R 669-675 1002
	A;Title: The complete A;Reference number: A;Accession: S25345 A;Molecule type: DNA	sequence of a 6146 bp fragment of Saccharomyces cerevisiae chromo 125345; MUID:92397594; PMID:1523889
SALPATVAVA-SPHTTSATPKPATLLPTNASVTPSGTSQP 262	A;Residues: 1-1609 <pa;cross-references: grisssubmitted="" l.;="" prot<="" td="" the="" to="" ur;frontali,=""><td><pre>JIL&gt; NNIPROT:P25653; GB:XS9720; EMBL:S43845; NID:g1907116; PIDN:CAA42254 unti, P. ein Sequence Database, March 1992</pre></td></pa;cross-references:>	<pre>JIL&gt; NNIPROT:P25653; GB:XS9720; EMBL:S43845; NID:g1907116; PIDN:CAA42254 unti, P. ein Sequence Database, March 1992</pre>
TTVTSQPPTTLISTVFTRAAATLQAMATTAVLT 304 	A; Reference number: SA; Accession: S19504 A; Molecule type: DNA A; Residues: 1-1609 < F	119504 ************************************
QY 305 TTFQA-PTDSKGSLETIPFTEISNLTLNTGNUVNPTALSMSNVES 348	A; Closs reletences: C; Genetics: A; Genetics: A; Gene: SGD: FIG2 A; Cross - references: S A.Man posttion: 38	GD:SO000685; MIPS:YCR089w
Qy 349 STWNKTASWEGREASPGSSSQGS 371	A, May position: 3K C, Keywords: transmemt F;4-20/Domain: transm F;1592-1609/Domain: t	rrane protein embrane #status predicted <tm1> ransmembrane #status predicted <tm2></tm2></tm1>
	Query Match Best Local Similari Matches 88; Cons	<pre>// Match 6.7%; Score 147.5; DB 2; Length 1609; Local Similarity 22.4%; Pred. No. 0.095; nes 88; Conservative 63; Mismatches 164; Indels 77; Gaps 14;</pre>
C;Species: Caenorhabditis elegans C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004 C;Accession: T34293 R:Miller N	Qy 41 IQSSLSF         Db 1057 IMSSSSN	41 IQSSLSKGIRGNEPVYTSTQEDCINSCCSTKNISGDKACNLMIFDTRKTARQPNCY 96
Submitted to the EMBL Data Library, April 1996 A; Description: The sequence of C. elegans cosmid F49E10. A; Reference number: 221500	Qy 97 LFFCPNE :   Db 1112 TTWCPLA	97 LFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHH 156 
ģ	Qy 157 HTDYSKE      : Db 1166 KTVYTT	HTDYSKPTDISWRDTLSQKFGSSDHLE-KLFKMDEASAQLLAYKEKGHSQSSQF 209
A/CLOBS-TETERICES: UNIFROJ: UZJOSPJ; EMBL: USJS41; FIDN AACBSIU6.1; GSFUB: GNUUUZB; CESF:F4 A/Experimental source: strain Bristol N2; clone F49810 A/Genetics: A/Genetics: A/Genetics: A/Aman road: F49810.2	Oy 210 SSDQELP 1	SSDQEIAHLIPENVSALPATVAVASPHTTSATPKPATLILPTNASV 254
A; Introns: 51/1; 92/3; 176/3; 235/3; 332/2; 514/1; 543/2; 569/3; 677/1; 732/3 Query Match 6.7%; Score 147.5; DB 2; Length 790; Best Local Similarity 25.6%; Pred. No. 0.039;	Qy 255 TPSGTSC :     Db 1285 SASSPSE	TPSGTSQPQLATTAPPVTTVTSQPPTTLLSTVFTRAAATLQAMATTAVLT 304
vative 3.	Qy 305 TTFQAPI	TTPQAPTDSKGSLETIPPTEISNLTLNTGNVXNPT339

340ALSMSNVESSTMNKTASWEGREASPGSSS 368	Best Local Similarity 21.0%; Pre Matches 74; Conservative 47;
Db 1404 CDDVTSTATTPPSTVTDTMTCTGSECQKTTSS 1435	Qy 63 CINSCCSTKNISGDKACNL
· E	Db 164 CVDSFMFGSCCTHNYTDNI
A45101 13 A45105	QY 119 IITDFPSLTRNLPSQELPQEDSL
# 700	Db 212MISGMTTIERP
994 #rext_cilalige 09-041	Qy 169 RDTLSQKFGSSDHLEKLFKMDEA
1.1	Db 255TASDLHGSASHPSSSSSSSS
intes in incegumentary mucin C.i :1447205	Qy 227PATVAVASPHTTS
A:Molecule type: mRNA	Db 313 PRPTGWTKPGIVNLPMPARPSKP
A:Cross-references: INTPROT:005049: GB:L02115: NID:c214147: PIDN:AAA74725.1: PID:c951460	QY 266 TIAPPUTTUTSQPPTTLISTVFT
	рь 373 ОТНРРОРНКРТКРОГЅРСТЅГАА
F;354-394/Domain: treffoil homology <tre3> F;354-564/Domain: treffoil homology <tre3> F;524-564/Domain: treffoil homology <tre3></tre3></tre3></tre3>	Qy 326 SNLTLNTGNVYNPTALSMSNV
F;573-613/Domain: trefoil homology <trp6> F;621-661/Domain: trefoil homology <trp6></trp6></trp6>	Db 433 RRTTTNKPTRPYQRPTTATSSS
Query Match 6.6%; Score 147; DB 2; Length 662; Rest Local Similarity 26 9%; Pred No. 0.033;	RESULT 15 B46629
; Conservative	<pre>mucin 6, gastric (3-repeat clone) - h N:Alternate names: MUC6</pre>
QY 228 ATVAVASPHTISATPKPATILLPTNASVTPSGTSQPQLAFTAPPVTTVTSQPP 279  1	C;Species: Homo sapiens (man) C;Date: 21-Sep-1993 #sequence_revisic C:Accession: B46629
280 TTLISTVETRAAATLOAMATTAVLTTTFOAPTDSKGSLETIPFTEISNLTLNTGNVYNPT	R.Toribara, N.W.; Roberton, A.M.; Ho, J. Biol. Chem. 268, 5879-5885, 1993
	A,Title: Human gastric mucin. Identif A;Reference number: A46629; MUID:9319
QY 340 ALSMSNVESSTMNKTASWEGREASPGSSSQGSVPENQYG 378	A;Accession: B46629 A;Status: preliminary
Db 507 TITITITITATITITISGECKMEPSKRADCGYPGIITESQCRSKGCCFDSSIPQIKWCFYS 566	A;Molecule type: mkNA A;Residues: 1-505 <tor></tor>
Cy 379 LP 380	A;Experimental Source: stomach A;Note: sequence extracted from NCBI
Db 567 LP 568	C;Genetics: A;Gene: GDB:MUC6
RESULT 14	A;Cross-references: GDB:134734; OMIM: A;Map position: 11p15.5-11p15.5 C:Keywords: glycoprofein
serine proteinease stubble-stubbloid (EC 3.4.21) - fruit fly (Drosophila melanogaster)	Onerv Match 6.5%; Sco
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: A47547	Best Local Similarity 23.9%; Pre Matches 78; Conservative 37;
.; Fristrom, D	FFCPNEEACPLK
A;Title: The Drosophila Stubble-stubbloid gene encodes an apparent transmembrane serine A;Reference number: A47547; MUID:91281671; PMID:7685111	DD 116 SSRPPPPFTTHSPFGSSPFS-S
A;Accession: A47547 A;Status: preliminary	QY 148 QA-VTPLAHHHTDYSKPTDISWF
A;Molecule type: mkNA A;Residues: 1-786 <app> A:Cross-references: IMIDEOT.OGS19: GR:E111451: NID:G158511: DIDN.AAA28918.1: DID:G158512</app>	Db 171 TSLVTPITHTVITPT
	Qy 207 SQFSSDQEIAHLLPENVSALPAT
Ajone. 35 sec. Ajones ereferences: FlyBase:FBgn0003319 C:Superfamily: serine proteinease stubble-stubbloid: trvosin homology	Db 189MŠTSAYIHSTPTGTIĀSPT
Cycywords: hydrolase; serine proteinase; transmentrane protein F:61-77/Domain: transmembrane #status predicted <tmn></tmn>	250
F;543-781/Domain: trypsin homology <try></try>	Db 246 SHASSTHHPEVTPTSTTNVTPKS

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GB:L07518; NID:g292045; PIDN:AAB61945.1; PID:g292046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        o, S.B.; Kuo, W.L.; Gum, E.; Hicks, J.W.; Gum Jr., J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ification of a unique species by expression cloning. 194895; PMID:7680650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  core 144.5; DB 2; Length 505;
red. No. 0.035;
Mismatches 101; Indels 111; Gaps 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSAL-- 226
                                                                                                                                                                                                                                                                                    | | : | : | : | | KPSKPIKKPIVYDRSPPPSSVPPSTSTSTTSTSLIWPA 372
                                                                                                                                                                                                                                                                                                                                                                                                                      FTRAAATLQAMATTAVLTTTFQAPTDSKGSLETIPFTEI 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AASSSHWPSSTTSTTSSTTSTTTTTTTRRTTTPTTT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQS 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ......HPQ- 188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SGTSOPOLATTAPPUTTVT----SOPPITLIS----TVF 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KSTSR----DISTPVTHTTSATSSRPPTPITTHSSPTRS 301
                                                                                  NIMIFDTRKTAROPNCYLFFCPNEEACPLKPAKGLMSYR 118
                                                                                                                                                                       SLLHGQFSQAVTPLAHHHTD-----YSKPTDISW 168
                                                                                                                                                                                                 || : : | ||
---HGAGTLVIRPSGPHHQGTLARPHPPPYQSKPT---- 254
                                                                                                                                                                                                                                                                                                                                        -----ATPKPATLLPTNASVTPSGTSQPQLA 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ion 18-Nov-1994 #text_change 09-Jul-2004
cred. No. 0.048;
Mismatches 162; Indels 70; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I backbone (NCBIN:128397, NCBIP:128399)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STSTISSKIPITIRPISSSSSSSGIVISSQ 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NVESSTMNKTASWEGREASPGSSSOGSVPENQ 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human (fragment)
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LQAMATTAVLTTFQAPTDSKGSLET-IPFTEISNLT	302 SPLSSTGPWTATSIKTTTTYPTPSHPQTTLTTHVPPFSTSSVTPSTHTVITPTHAQMST- 360	347 ESSTWNKTASWEGREASPGSSSQGSVP 373
ò	qq	ò

373	
ESSTMNKTASWEGREASPGSSSQGSVP	
347	

<sup>361 -----</sup>SASIHSIPTGTVP 373 Search completed: April 26, 2005, 21:52:31 Job time : 55 secs q

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

April 26, 2005, 20:26:45; Search time 122 Seconds (without alignments) 1809.067 Million cell updates/sec Run on:

Title: Perfect score:

US-10-735-014-83
2211
1 MFFGGEGSLTYTLVIICFLT......LRRKRYSRLDYLINGIYVDI 431

Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues Searched:

1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## STIMMARTES

	Description	js homo sapien	macac	0 homo sapien	mus m	0 mus musculu	2 mus musculu	4 homo sapien	1 mus musculu	5 homo sapien	homo	caenc	2 homo	3 homo	7 homo	homo	homo	caeno	5 yarrowia li		0 caenorhabdi	8 litomosoide		_	7 coccidioide	7 homo	4 homo sapien		3 equid herpe		2 drose	4 bacteroides
	Descr	29h8j5	095kg7	09mu60	09cr33	28k01	Q8vcp2	<b>09h2k</b> 4	Q9d8n1	<b>Q96£05</b>	Q8wwq4	Q7ytr7	0685j	Q685j	014887	Q8wwq5	000446	017921	Q6ci85	094317	009550	09xzz8	P28968	Q6dle0	P54197	00281	09hc8	Q8tfg9	Q66vc3	P98088	Q6v4a	Q6a56
SUMMARIES	ΩI	MNS1 HUMAN	MNS1_MACFA	Q9NW60	MNS1 MOUSE	Q8K0 <u>T</u> 0	Q8VCP2	Q9H2K4	Q9D8N1	Q96F05	Q8WWQ4	Q7YTR7	Q685J2	Q685J3	014887	Q8WWQ5	000446	Q17921	Q6C185	094317	YQU3 CAEEL	09XZZ8	VGLX_EHV1B	Q6DLE0	CHI2 COCIM	MUC2_HUMAN	MUSB_HUMAN	YL61_SCHPO	Q66VC3	MUSA_HUMAN	Q6V4A2	Q6A564
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d	Query Match	100.0	92.2	91.5	52.7	22.7	8.9	8.9	8.9	8.5		7.6	7.4	7.4	7.3	7.1	7.1	7.0	7.0	7.0	6.9		6.8	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.7
	Score	2211	2039	2022	1164.5	503	197.5	197	196.5	188	180.5	168	. 163	163	160.5	157.5	156.5	155.5	154.5	154	151.5	150.5	150.5	150.5	150.5	149.5	149.5	149		148.5	148	148
	Result No.	-	N	e	4	ß	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Q20599 caenorhabdi Q95qf5 caenorhabdi P25653 aecofaromyc Q05049 xenopus lae Q8v0m4 equid herpe Q86AX idrcyosteli Q6bhg8 debaryomyce Q05319 drosophila Q24Q17 drosophila Q29ye4 homo sapien Q20X3 human herpe Q91487 caenorhabdi Q81487 homo sapien
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Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Alusner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
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A bottchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
A brapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
A brapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
A bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
A Bosak S.A., McEwan P.J., McKernan R.J., Malek J.J., Hulyk S.W.,
A hilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Pahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
A Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Butterfield Y.S.M., Krzywinski M.I., Schakt J., Smailus D.E.,
B. Chimwood J., Schmutz J., Marra M.A.;
T "Generation and initial analysis of more than 15,000 full-length human man manalysis of more chan 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                     "The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: bioinformatics assessment."; bioinformatics assessment."; Genome Res. 13:2265-2270(2003).
Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.,
Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
Yi S., Watanabe C., Wieand D., Woods K., Xie M.-H., Yansura D.
Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,
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Thr-rich.
N-linked (GlCNAc. .) (Potential).
V -> I (in Ref. 3).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-!- SIMILARITY: Contains 1 MANSC domain.
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MANSC domain containing p
Extracellular (Potential)
Potential.
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SIGNAL 1 26
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EMBL; AY358563; AAQ88926.1; -.
EMBL; BC032998; AAH32998.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR011106; MANSC_N.
Pfam; PP07502; MANSC; 1.
PROSITE; PS50986; MANSC; 1.
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431 AA;
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation — the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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TPKPATILIPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Cercopithecidae;
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MANSC domain containing protein 1.
Extracellular (Potential).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-UUL-2004 (Rel. 44, Created)
05-UUL-2004 (Rel. 44, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
MANSC domain containing protein 1 precursor (QtrA-13483).
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SIGNAL 1 26 Potenti
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InterPro; IPR011106; MANSC_N.
Pfam; PF07502; MANSC; 1.
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Gaps

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Indels

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0; Mismatches

Matches 431; Conservative

Similarity

Local

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MANSC domain containing protein 1 precursor Name=Mansc1;
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                                                                                                                                                Gaps
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PLUDMEd=14702039; DOI=10.1038/ng1285;
PLUDMEd=14702039; DOI=10.1038/ng1285;
PLUDMEd=14702039; DOI=10.1038/ng1285;
PLAGRAMETEN A., Hayachi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamento J., Saito K., Kawai Y., Isono Y., Nakkaura Y., Nagahari K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yakeuta N., Sato K., Tanikawa B., Omura Y., Abbe K., Kamihara K., Kateuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Ishimori K., Tani H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
Hypothetical protein FLJ10298.
Homo sapiens (Human)
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                           linked (GlcNAc. ..) (Potential).
BF10996E87F76C69 CRC64;
                                                                                                                                               ;
                                                                                                                        Score 2039; DB 1; Length 431;
Pred. No. 5.5e-125;
9; Mismatches 24; Indels (
Potential.
Cytoplasmic (Potential).
MANSC.
Thr.rich.
N-linked (GlCNAc. ..) (P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               397 AA
                                                                                                   MW;
                                                                                                                        92.2%;
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                                                                                                                     Query Match 92.2
Best Local Similarity 92.3
Matches 398; Conservative
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431 AA;
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NCBI_TaxID=9606;
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CARBOHYD
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                                                                                                   SEQUENCE
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Ranchori K., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J.,
Ranchori K., Takahashi-Fujii A., Hara H., Tanase T., Nomura Y.,
Taylya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N.,
Musashino K., Yuuki H., Oshima A., Sasaki N., Imose N.,
Wasashino K., Yuuki H., Oshima A., Sasaki N., Sano S.,
Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
Noriya S., Momiyama H., Satch N., Takami S., Tersshima Y., Suzuki O.,
A. Hishigaki H., Watanabe T., Suguyama A., Takemoto M., Kawakami B.,
Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y.,
Rujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
A. Don T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y.,
Rawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
A. Attani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T.,
Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M.,
Togashi T., Oyama M., Hata H., Watanabe M., Kometeu T.,
A. Matsumura K., Nakajima Y., Mizuno T., Kikuchi H., Masuho Y., Yamashita R.,
A. Nakai K., Yada T., Nomura N., Kikuchi H., Masuho Y., Yamashita R.,
A. Nakai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
Makai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
Makai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
Makai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
Makai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
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Makai K., Yada T., Nakamura Y., Oharao O., Isogai T., Sugano S.,
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Pred. No. 6.4e-124;
0; Mismatches 0;
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Q9CR33; Q80V71;
O5-JUL-2004 (Rel. 44, Created)
O5-JUL-2004 (Rel. 44, Last sequ
O5-JUL-2004 (Rel. 44, Last ann
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EMBL; AK001160; BAA91526.1; -.
INICEPTRO; IPRO11106; MANSC.N.
PEam; PFO7502; MANSC; 1.
SEQUENCE 397 AA; 43062 MW;
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Best Local Similarity 92.1%;
Matches 397; Conservative
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE STRAIN-C57BL/60; TISSUE-Cecum, Colon, and Medulla oblongata;

MEDLINE-2234683; PubMed=1246681; DOI=10.1038/nature01266;

Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,

Nikaido I., Osato N., Baito R., Suzuki H., Yamanaka I., Kiyosawa H.,

Yagi K., Tomaru Y., Hasegawa Y., Mogami A., Schonbach C., Gojobori T.,

Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,

Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,

Baldarelli R., Gariboldi M., Glasi C., Godzik A., Gough J.,

Anala E., Dragami T.A., Fletcher C.F., Forrest A., Erazer K.S.,

Gasterland T., Gariboldi M., Glasi C., Godzik A., Gough J.,

Romadaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,

Romagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,

Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,

Angashima T., Nunata K., Pontius J.U., Qi D., Ramachandran S.,

Retrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,

Ravasi T., Reed J.C., Reed D.J., Reid J., Ramachandran S.,

Sandelin A., Schneider C., Semple C.A., Sectou M., Shimada K.,

Sandelin A., Schneider C., Semple C., Wang Y., Watanabe Y., Wells C.,

Wulming L.G., Wymahaw-Boris A., Yanagisawa M., Yang I., Yang L.,

Wind Z., Zavolan M., Zhu Y., Zimmer A., Yang Sakazume N., Sato S.,

Antara, Hara A., Hashizume W., Imocanis A., Yaswa M., Yang I., Yang L.,

Analyazaki A., Sakai K., Sasaki U., Aizawa K., Shinagawa A.,

Nasunishi A., Yoshino M., Waterston R., Lander B.S., Rogers J.,

Nathalyais G. the mouse transcriptome based on functional annotation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAINE-FVB/N; TISSUE-Breast tumor;

MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

MELSCHOL S. P., Coolling F.S., Wagner L., Shenmen C.M., Schuler G.D.,

MELSCHOL S. P., Marusing R., Farmer A.A., Rubin G.M., Hong L.,

MELSCHOL S., Marusing M., Roler R. A., Rubin G.M., Hong L.,

MELSCHOL M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

MELSCHOL M., J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

MESSAR, McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

MILLIAON D.K., Muzny D.M., Sodergren B.J., Iu X., Gibbs R.A.,

MILLION D.K., Muzny D.M., Sodergren B.J., Iu X., Gibbs R.A.,

Milting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Milting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Milting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Milting M., Malan M., Young A.C., Shevchenko Y., Bouffard G.G.,

Milting M., Kazywinski M.I., Schalska U., Smailus D.E.,

MILTINE A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Markan M.A., Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones S.J.M., Marra M.A.,

Mennerch A., Schein J.E., Jones M.A.,

Mennerch A., Schein J.E., J.M., Marra M.A.
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
-!- SIMILARITY: Contains 1 MANSC domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nature 420:563-573(2002)
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                                                            NCBI_TaxID=10090;
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EMBL; AK018660; BAB31329.1; -. EMBL; AK018635; BAB31319.1; -.

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301 AVLTTTROAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTWNKTASWEGR 360
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                                                                                                                                                                                                                                               protein 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 52.7%; Score 1164.5; DB 1; Lengtn Best Local Similarity 59.9%; Pred. No. 6.1e-68; Matches 258; Conservative 37; Mismatches 119; Indels
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Extracellular (Potential)
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Cytoplasmic (Potential).
MANSC.
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Last annotation update)
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I -> V (in Ref. 2).

F -> S (in Ref. 2).

F -> G (in Ref. 2).

M -> T (in Ref. 2).

E -> A (in Ref. 2).

G -> A (in Ref. 2).

G -> A (in Ref. 2).
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N-linked
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L -> V
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                  EMBL; AKO33557; BAC28357.1; -.
EMBL; AKA46837; BAC32892.1; -.
EMBL; BC0393930; AAH39930.1; -.
MGD; MGI:1914979; 9130403P13Rik.
InterPro; IPR011106; MANSC_N.
Pfam; PF07502; MANSC; 1.
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01-OCT-2002 (TrEMBLrel. 22,
01-OCT-2002 (TrEMBLrel. 22,
01-MAR-2004 (TrEMBLrel. 26,
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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01-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9H2K4
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  셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
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                                                                                                  RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

R Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max. S.I., Wang J., Hsieh F.,

Bitchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Bosak S.A., McCwan D.J., McKernan R.J., Marason R.D., Mullahy S.J.,

Robards S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

R Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

R Halton D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

R Halton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Mitting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

R Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

R Kzzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

R Generation and initial analysis of more than 15,000 full-length human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  287 FTRAAATLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNV 346
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 PTTVAVAPLRNVSATLKPALLL-TSISVTAKTLKOKE-ATTASPVTTVTSKLPAVPGSTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FT-----BVVTHQAALTNTFQAHTDSKGILETMPFQGGSTLT-----SDPRHGKSSTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ESSTMNKTASWEGREASPGSSSQGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGR
                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 194;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 56; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=FVB/N; TISSUE-Liver;
Director MGC Project,
Submitted (UNN-2002) to the EMBL/GenBank/DDBJ databages.
EMBL; BC031372; AAH31372.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194 AA; 20701 MW; 11C1F299E1FB3C44 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22.7%; Score 503; DB 2; 59.5%; Pred. No. 3.5e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 122; Conservative 13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MGI:1914979; Manscl. GO:0005615; C:extracellular space; TAS. GO:0016021; C:integral to membrane; TAS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
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01-MAR-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1810055G02Rik protein.
Name=1810055G02Rik;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                   _TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62
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SEQUENCE FROM N.A.

STAIN=FVBB/N; TISSUB=Liver;

RATAIN=FVBB/N; TISSUB=Liver;

MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RATAIN=FVBB/N; TISSUB=Liver;

RA Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Ratauberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Altschul S.P., Zebeberg B. Buercow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moover T., Max S.I., Wang J., Heish F.,

Rapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raba S.W. McZawan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Rodak S.A., McZwan P.J., McKernan R.J., Malek J.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Hale S., Garcia S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Ratiguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

T. "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HGTNTSTPT-----TREGTTDRV-----TSRTLAAPTSSGPSSAEQTRPTTIA 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  353
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNK 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       250 VPARATSLSPDVDVISPTTQPS--PTLP-----TQGTGG--PGTLLTTEQVGTKTTSG 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354 TASWEGREASPGSSSQGSV-----PENQYGLPFE-----KWLLIGSLLFGV 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -ASVTPSGTSQPQLATTAPPVTT-------VTSOPPTTLISTVFTRAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---SSDQEIAHLLPENVSALPAT--VAVASPHTT------SATPKPATLLPTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 156 HHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8.9%; Score 197.5; DB 2; Length 392; 26.5%; Pred. No. 7.3e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
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MGD; MGI:1919306; 1810055G02Rix,
GO; GO:0005615; C:extracellular space; TAS.
GO; GO:001601; C:integral to membrane; TAS.
SEQUENCE 392 AA; 41081 MW; 1D79796C791211FA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     37; Mismatches 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 395 LFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN=FVB/N; TISSUE=Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and mouse cDNA sequences."
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Hypothetical
SEQUENCE 3
                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                   SEQUENCE
---LPINASV--TPS--GISQPQLAITAPPVITVISQPPTILISTVFTRAAATLQAMAIT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------VLTTTFQAPTDSKG 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221 ANTSSPMSTRPSPSKHMPSDTAASPVPPMRPQAQGPISQVSVDQPVVNTTNKSTPMPSNT 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    359
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 ISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPS 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QELPQEDSLLHGQFSQAVTPLAHHHTDYSKPTDISWRDTLSQKFGSSDHLEKLFKMDEAS 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77 MEVITEDI-----SRIDVSEP-----ATSGGAADGVISIAPTAVAS 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHT----TSATPKPATL 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STTAA-----SITTAASSMTVASSAP-TTAASSTTVASIAPTTAASSMTAASSTPMTL 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 LVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
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MON-2001 (TrEMBLrel. 17, Last sequence update)
CT-2002 (TrEMBLrel. 22, Last annotation update)
musculus 10 day old male pancreas cDNA, RIKEN full-length enriched
                                                                                                                                                        SEQUENCE FROM N.A. MEDLING BLOWN S.D. 10.1006/geno.2000.6492; MEDLINE=21295044; PubMed=11401438; DOI=10.1006/geno.2000.6492; Twells R.C.J., Metzker M.L., Brown S.D., Cox R., Garey C., Hammond H., Hey P.J., Levy E., Nakagawa Y., Philips M.S., Todd J.A., Hess J.F.; "The sequence and gene characterization of a 400-kb candidate region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 ALPAPTSTSTGRTPSTTATGHPSLSTALAQVPKSSALPRTATLATLATRA----QTVATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      --SMS-NVESSTMNKTASWEG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TPEPAPTPTV--VTTTKAQAREPTASPVPVPHTSPIPEMEAMSPTTQPSPMPYTQRAAGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------REASPGSSSQGSVPENQYG--LP-------FB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LVLIWIFSLSLSESHAASNDPRNFVPNKWWKGLVKRNASVETVDNKTSEDVTMAAAS---
                                                                                                                                                                                                                                                                                                                                                      Twells R.C., Merzker M.L., Brown S.D., Cox R., Garey C., Hammond H., Hey P.J., Levy E., Nakagawa Y., Philips M.S., Todd J.A., Hess J.F.; Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.

EMBL, AF264791, AAG363936.1; InterPro; IPR001395, Aldo/Ket red.

PROSITE; PS00063; ALDOKETO_REDUCTASE_3; UNKNOWN_1.

SEQUENCE 449 AA; 46100 MW; 11C8B0FCC3BBF921 CRC64;
                                                                   Chordata; Craniata; Vertebrata; Euteleostomi;
Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLINGIYVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  166; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.9%; Score 197; DB 2;
22.2%; Pred. No. 9.3e-05;
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                                                                                                                                                                                                                                                                     for IDDM4 on chromosome 11q13.";
Genomics 72:231-242(2001).
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Matches 117; Conservative
      JM4E3.
Name=Cllorf24;
---ions (Human)
                                                                     Eukaryota; Metazoa;
                                                                                          Mammalia; Eutheria;
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SEQUENCE FROM N.A.
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01-OCT-2002
Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=CS7BL/6J; TISSUB=Pancreas; MEDINE=9927923; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9; Carninci P., Hayashizaki Y. Hayashi CDNA cloning.";
clone:1810055G02 product:hypothetical Threonine-rich region ng protein, full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation
60,770 full-length cDNAs.";
Nature 420:563-873 (2002).
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                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
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MEDLINE-21085660; PubMed-11217851; DOI-10.1038/35055500;
RIKEN FANTOM CONSORTIUM;
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The FANTOM Consortium,
the RIKEN Genome Exploration Resea
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392 AA; 41095 MW;
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Name=1810055G02Rik;
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Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RIDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RIJUSTE, Collins F.S., Wagner L., Shanem C.M., Schuler G.D.,
A. Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
B. Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A. Stapleton M., Soares M.B., Bonaldo M.F., Gasvant T.L., Scheetz T.E.,
B. Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
A. Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
B. Bosak S.A., McEwan P.J., McKernan K.J., Makan K.B., Mullahy S.J.,
B. Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Yilalon D.K., Muxny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Raywinski M.I., Skalska U., Smallus D.E., Schnerch A., Schein J.B.,
A. Jones S.J., Marra M.A., Shalska U., Smallus D.E., Schnerch A., Schein J.B.,
A. Jones S.J., Marra M.A., Stalska U., Smallus D.E., Schnerch A., Schein J.B.,
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2004 (TrEMBLrel. 28, Last annotation update)
Chromosome 11 open reading frame 24 (FP2568) (Cllorf24).
Name=Cllorf24, ORFName=UNQ1872,
Homo sapiens (Human).
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STTAA-----SITTAASSMTVASSAP-TTAASSTTVASIAPTTAASSMTAASSTPMTL 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 ALPAPISTSTGRIPSTTATGHPSLSTALAQVPKSSALPRIATLATLATRA----QTVATT 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221 ANTSSPMSTRPSPSKHMPSDTAASPVPPMRPQAQGPISQVSVDQPVVNTTNKSTPMPSNT 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---SMS-NVESSTMNKTASWEG- 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TPEPAPTTOV--VTTTKAQAREPTASPVPVPHTSPIPEMEAMSPTTQPSPMPYTQRAAGP 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----REASPGSSSQGSVPENQYG-LP-------REASPGSSSQGSVPENQYG-LP--------FE 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 ISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFPSLTRNLPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---LPTNASV--TPS--GTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAAATLQAMATT
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                                                                                               MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P., Earon D., Roster J., Grimaldi C., Gu Q., Hass P.E., Heldens S., Huang A., Kim H.S., Klimowski L., Johnson S., Lee J., Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J., Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A., Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.H., Yansura D., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I., Godowski P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 LVIICFLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTSTQEDCINSCCSTKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LVLIWIFSLSLSESHAASNDPRNFVPNKWWKGLVKRNASVETVDNKTSEDVTMAAAS---
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                                                                                                                                                                                                                                                                                           "The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins:
                   Qin W.X., Zhao X.T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels 196;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 449;
                                                     to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR001395, Aldo/ket red.
PROSITE; PS00063; ALDOKETO REDUCTASE 3; UNKNOWN 1.
SEQUENCE 449 AA; 46142 WW; BF984AA360F6C415 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8.5%; Score 188; DB 2; 22.0%; Pred. No. 0.00036;
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E FROM N.A.
., Zhou X.M., Zhang P.P., Jiang
., Gu J R.;
d (APR-2001) to the EMBL/GenBan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49;
                                                                                                                                                                                                                                                                                                                             bioinformatics assessment.";
Genome Res. 13:2265-2270(2003).
EMBL; BC011765; AAH11765.1; -.
EMBL; AF870372; AAQ15208.1; -.
EMBL; AX358754; AAQ89114.1; -.
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                                                                                         SEQUENCE FROM N.A.
 SEQUENCE FROM
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                    Huang Y.
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WormPep; C30H6.11; CE34720.
  investigating biology.";
Science 282:2012-2018(1998)
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Matches 58; Conserv
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Best Local Similarity
                                                                       SEQUENCE FROM N.A. STRAIN=Bristol N2;
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                                                                                                                     Mortimore B.J.;
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25-OCT-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     607 VTAPSPLVGEPPAQTQSTSSWQKSRTTTLVTSSITSTTQTSTTSAPTTSTTPASIPSTTS 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    161 SKPTDISWRDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLP 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221 ENVSALPATVAVASP--HTTSATPKPATLLPTNASVTP------SGTSQPQLATTA 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STISA-PTTSTISAPTTSTTSAPTASTTSAPTSTSSAPTTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTTSTTSAPTT
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Rhabditidae; Peloderinae; Caenorhabditis.
NCBI_TaxID=6239;
                                                                                                                                                                                                                                                             MEDINE=21426417; PubMed=11535137; DOI=10.1042/0264-6021:3580763; Escande F., Aubert J.P., Porchet N., Buisine M.P.; "Human mucin gene MUC5AC: organization of its 5'-region and central
                                                                                                                             Eukaryota, Metazoa; Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

8.2%; Score 180.5; DB 2; Length 1349;
Best Local Similarity 21.6%; Pred. No. 0.0044;
Matches 88; Conservative 62; Mismatches 174; Indels 83;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       1349 AA; 135599 MW; 4DC3C1544F1E5EBA CRC64;
  Created)
Last sequence update)
Last annotation update)
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1-MRR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein G30H6.11.
ORFNames=C30H6.11;
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                                                                                                                                                                                                                                                                                                                                                          358:763-772 (2001).
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EMBL; AJ298318; CAC83675.1; -.
01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. 20, 01-OCT-2003 (TrEMBLrel. 25,
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1349
                                                                                                                     Homo sapiens (Human)
                                                                       Mucin 5 (Fragment).
                                                                                                                                                                                                                                                                                                                                           repetitive region."
                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                               Name=MUC5AC;
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NON TER
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              270 AYNYYNYTNDNAHYD-----NNSNNHNYSENFWRLMLSLPIAFSINFTLLNSIYLQHMK 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                289 RAAATLOAMATTAVLITIFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVES
                                                                                                                                                                                                                                                                                                                                                                                                          229 TVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                    38;
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                                                                                                                                                                                                                                                                                      Length 519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              425530 MW; 180AF264C8614284 CRC64;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                  Hypothetical protein.
SEQUENCE 519 AA; 56012 MW; 93C2CFF9EC339D1A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last seguence update)
Last annotation update)
                                                                                                                                                                                                                                                                                         7.6%; Score 168; DB 2;
27.1%; Pred. No. 0.0087;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          324 YDLTSILFNALGTVTL-----LMRKIFCNIQY 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -- LFGVLFLVIGLVLLGRILSESIRRKRYSRLDY 422
                                                                                                                                                                                                                                                                                                                                                 22; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR006209; EGF like.
InterPro; IPR011047; Quin alc_DH_like.
InterPro; IPR000082; SEA.
                                                                                                           GO; GO: 0005529; F: sugar binding; IEA.
InterPro; IPR001304; Lectin_C.
SMART; SM00034; CLECT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
                             EMBL; Z81044; CAE17706.1; -.
WormBase; WBGene00007828; C30H6.11.
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PROSITE; PS50024; SEA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IISSUE=Pancreatic adenocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IISSUE=Pancreatic adenocarcinoma;
                                                                                                                                                                                                                                                                                                                    27.1%;
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                                                                                                                                                                                                                                                                                                                                                     SMPASTWKVASSEAITLLTTPVEISTPVTISAQASSSPTTAEGPSLSNSAPSGGSTPLTR 279
                                                                                                                                                                                                                          DHLEKL-----FKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAV 232
                                                                                                                                                                                                                                                                                                                                                                                                                      QPPTTLI-----STVFTRAAATLQAMATTAVLTTTFQAPTDSKG-SLETIPFTEISNLT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280 MPLSVMLVVSSEASTLSTTPAATNIPVITS---TEASSSPTTAEGTSIPTSTYTEGSTPL 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   147 SQAVTPLAHHHTDYSKPTDISW-----RDTLSQKFGSSDHL----EKLFKMD---- 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---EASAQLLAY----KEKG----HSQSSQFSS--DQEIAHLLPENVSALPATVAVAS 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75 SHPEVSIEHLGOVVQCSREEGLVCRNQDQQCPFKMCLNYEVRVLCCETPKGCPVT---ST 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PHITISATPKPATLLPTNAS-----VIPSGISQPQLATTAPPVITVTSQPPTILI 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               284 STVFTRAAATLQAMATTAVLTTTFQAPTDSKGSLET---IPFTBISNLTLNTGNVYNPTA 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAPTISTISTED SAPTISTISAPTSSITSAPTSSITSAPT 251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    || || || ::| |:::| SQPVTRDCHLRCTWTKWFDVDFPSPGPHGGDKETYNNIIRSGEKICRRPEBITRLQCRAE 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   330 LNTGNVYNPTA-----LSMSNVESSTMNKTA-----SWEGREASPGSSSQGSVP 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : | : | | : | : | : | | 337 TSTPASTMPVATSEMSTLSITPVDTSTLVTTSTEPSSLPTTAEATSMLTSTLSEGSTP 394
                                                                           SQHVRTGSATNTATGTTSTNVVEPRMYL-----SCSTNPEMTSIESSVTSDTPGVSST
                                                                                                                          RNLPSQELPQEDS-----LLHGQFSQAVTPLAHHHTD--YSKPTDISWRDTLSQKFGSS
                                                                                                                                                                          RMTPTESRTTSESTTSDSTTLFPSPTEDTSSPTTPEGTDVPMSTPSEESISSTMA--FVST
                                                                                                                                                                                                                                                                                                                       ASPHTTS--ATPKPATLLPT------NASVTPSGTSQPQLATTAPP--VTTVTS
                              TKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFP--SLT
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Guyonnet-Duperat V., Audie J., Debailleul V., Laine A., Buisin
Zoultina-Caliegue S., Pigny P., Aubert J., Porchet N.;
"Characterization of the human mucin gene MUC5AC: a consensus
Eysteine-rich domain for 11p15 mucin genes.";
Biochem. J. 0:0-0(1994).
EMBL; Z34277; CAA84031.1; -.
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Last annotation update)
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Chordata;
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NON TER 1
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SEQUENCE
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     19;
                                                                                                                                                                                       56 SQHVRTGSATNTATGTTSTNVVEPRMYL-----SCSTNPEMTSIESSVTSDTPGVSST 108
                                                                                                                                                                                                                                                                            167 APLPSFEAYTSLTYKVD-MSTPLTTSTQASSSPTTPEST-----TIPKSTNSEGSTPLT 219
                                                                                                                                          70 TKNISGDKACNIMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSYRIITDFP--SLT 127
                                                                                                                                                                                                                                           RNLPSQELPQEDS-----LLHGQFSQAVTPLAHHTD--YSKPTDISWRDTLSQKFGSS 179
                                                                                                                                                                                                                                                                                                                                           DHLEKL-----FKMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAV 232
                                                                                                                                                                                                                                                                                                                                                                                                                                        ASPHITS--ATPKPATILIPT------NASVTPSGTSQPQLATTAPP--VTTVTS 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QPPTTLI-----STVFTRAAATLQAMATTAVLTTTFQAPTDSKG-SLETIPFTEISNLT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280 MPLSVMLVVSSEASTLSTTPAATNIPVITS---TEASSSPTTAEGTSIPTSTYTEGSTPL 336
                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      330 INTGNVYNPTA-----LSMSNVESSTMNKTA-----SWEGREASPGSSSQGSVP 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    337 ISTPASTMPVATSEMSTLSITPVDTSTLVTTSTEPSSLPTTAEATSMLTSTLSEGSTP 394
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                                                  16 ICFLTLRLSASONCLKKSLEDVVIDIQSSLSKGIRGNEPVYTS----TQEDCINSCCS--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 ICPLTLRLSASQNCLKKSLEDVVIDIQSSLSKGIRGNEPVYTS----TQEDCINSCCS--
       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Moniaux N., Andrianifahanana M., Jones A.M., Juntker W.M., Schmied B.M., Barra S.K.; Membrane-Anchored Mucin Expression in Pancreatic Adenocarcinoma: Characterization of a New Marker, MUCI)."; Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Euteleostomi;
     92;
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
     Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4493 AA; 451718 MW; 06BID6C680499AAS CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Moniaux N.B.;
Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ606307; CAE54435.1;
InterPro; IPR008985; ConA like_lec_gl.
InterPro; IPR006209; EGF like.
InterPro; IPR011047; Quin_alc_DH_like.
InterPro; IPR000082; SEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
  Mismatches 161;
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PROSITE; PS50024; SEA; 1.
70;
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Conservative
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Best Local Similarity
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Q685J3;
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2193 RNQDQQGPFKMCLNIEVRVLCCETPKGCPVT---STPVTAPSTPSGRAISPTQSTSSWQK 2249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2034 CYNYEIRIQCCETVNV------CRDITRPPKTVATTRPTPH-----PTGAQTQT 2076
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 CIN----SCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLKPAKGLMSY 117
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---RDTLSQKFGSSDHLEKLFKMDEASAQLLAYKEKGHSQSS-----QFSSDQ----313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292 ATLQAMATTAVLTTTFQAPTDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTM 351
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254 -----VTPSGTSQPQLATT-----AP-----PVTTVTSQPPTTLISTVFTRAA 291
                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=21426417; PubMed=11535137; DOI=10.1042/0264-6021:3580763; Becande F., Aubert J.P., Porchet N., Buisine M.P.; "Human mucin gene MUCSAC: organization of its 5'-region and central repetitive region.";
                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 7.1%; Score 157.5; DB 2; Length 2 Best Local Similarity 23.1%; Pred. No. 0.29; Matches 87; Conservative 38; Mismatches 142; Indels
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                                                                                                                                                                                           Last sequence update)
Last annotation update)
                      252 TSTTSAPISSTISTPQISKTSAATSSTISGS 282
341 LSMSNVESSTMNKTASWEGREASPGSSSQGS 371
                                                                                                                                    PRT; 2448 AA.
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NON_TER 2448 2448
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EMBL; AJ298317; CAC83674.1; -
HSSP; P56682; ICCV.
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01-MAR-2002 (TrEMBLrel. 20,
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Mucin 5 (Fragment).
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Pfam; PF01826; TIL; 2.
Pfam; PF00094; VWD; 3.
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SEQUENCE
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Gallus ga
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Patent: JP 2002505850-A 68 26-FEB-2002;
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03-DEC-1997 US 60/06741
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JP 2002505850-A/68
26-FEB-2002
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Homo sapiens (human)
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-MODEL=frame+ p2n. model -DEV=xlp
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-Gegnz_1/USFTO_spool_p/US10735014/runat_26042005_113100_7413/app_query.fasta_1.583
-DB-GenEmbl -OFWT=fastap -SUPFIX=rge -MINMATCH=0.1 -LOOPCI_=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR MAX=100 -TRR MINO -ALIGN=15 -MODE=LOCAL
-OUTFWT=pcto -NORM=ext -HEAPSIZE=500 -MINIEN=0 -MAXIEN=200000000
-USER=US10735014_@CGN_1 1_5600_@runat_26042005_113100_7413 -NCPU=6 -ICPU=3
-NO_WMAP -LARREQUERY -NEG SCORES=0 -WAIT -DSPBALOK=100 -LONGLOG
-DBV TIMEOUT=120 -WARN TIMEOUT=30 -THRRADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPOP=6
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AR252736 Sequence
AR429104 Sequence
AR534995 Sequence
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4428.371 Million cell updates/sec
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                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                  nucleic search, using frame_plus_p2n model
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1 (bases 1 to 2284)

Winterbottom, J. M., Shimp, L., Boyce, T. M. an Implant, method of making same and use of treatment of bone defects

Patent: US 6478825-A 514 12-NOV-2002;

Location/Qualifiers
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/organism="unknown"
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PI JIAN ZHENG
PC CL2N15/09, C07K14/47, C07K16/18, C12N1/19, C12N1/21, C12N5/10, PC C12P21/08, C12N15/00, C12N5/00
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Aorganism="Homo sapiens"
And Lype="genomic DNA"
Ab_xref="taxon:9606"
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· & &	1 LeuargleuseralaserglnasnCysleulyslysserLeugluasyvalValleAsp	Oy 381 PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly 400
8 8	1   IleGlnSerSerLeuSerLysGlylleArgGlyAsnGluProValTyrThrSerThrGln 	Qy 401 LeuValLeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
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& g	glysthralaargginProAsncystyrLeuPhePheCys 	RESULT 3 AR429104 LOCUS AR429104 AR429104 DOBINITION Sequence 82 from patent US 6642360.
oy Oy	101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArglleIle 120 	
oy B	121 ThraspPheProSerLeuThrargasnLeuProSerGlnGluLeuProGlnGludaspSer 140 	ORGANISM Unknown. Unclassified. REFERENCE 1 (bases 1 to 2284) AUTHORS Filvaroff,E., Goddard,A., Godowski,P.J., Grimaldi,J.C., Gurney,A.L.
% q	141 LeuleuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisHhrAspTyr 160 	and Wo Secret Cartil L Patent
oy Q	161 SerLysProThrAspIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180 	FEATURES Location/Qualifiers  12284 /organism="unknown" /mol_type="genomic DNA"
ò q	181 HisbeuglulysieuPheLysMetAspgluAlaSerAlaglnLeuLeuAlaTyrLysglu 200 	ent Scores: 5.79e-112 Length: No.:
کو م	201 LysglyHisSerGlnSerSerGlnPheSerSerAspGlnGlulleAlaHisLeuLeuPro 220 	Score: 2211.00 Matches: 431 Percent Similarity: 100.00\$ Conservative: 0 Best Local Similarity: 100.00\$ Mismatches: 0 Query Match: 100.00\$ Indels: 0
ጵ	221 GluAsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla 240 	6 Gaps: 4-83 (1-431) x AR429104 (1-2284)
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\times \q	Compared	Qy 21 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValI1eAsp 40
ò 6	ThrLeuileSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr 300 	Oy 41 IleGinSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGin 60
3 & 5	1 AlaValleuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrII 320	Qy 61 GluAspCys1leAsnSerCysCysCysTrLvsAsn1leSerGlyAspLysAlaCysAsn 80
3 8 8	ProPheThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340	Oy 81 Leumet11ePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys 100
3 8	41 LeuSerMetSerAsnValGluSerSerThrMetAsnLygThrAlaSerTrpGluGlyArg 360	Qy         101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuWetSerTyrargllelle 120
qa	1246 CTTTCTATGTÇAAATGTGGAĞTCTTCCACTATGAATAAACTGCTTCCTGGGAAGGTAĞĞ 1305	121 ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer 14

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Gurney, A.L.
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1 (bases 1 to 2284)
Filvaroff, E., Goddard, A., Godowski, P.J., Grimaldi, J.C., Gu and Wood, W.I.
Antibodies against a secreted polypeptide that stimulates of proteoglycans from cartilage
Patent: US 6734288-A 82_11-MAY-2004;
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                    /organism="unknown"
/mol_type="genomic DNA"
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                                                                              Location/Qualifiers
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Qy 261 GlnProGlnLeuAlaThrThrAlaProProValThrValThrSerGlnProProThr 280	1006 CAGCCACAGCTGGCCACCACGTCTAACCACTGTCACTTCTCAGCCTCCACG	1066 ACCTCATTTCTACAGTTTTTACAGGCTGCGGCTACATACTCAGGCTAGGCTACAGAGTACTTTTACAGGCTACAGGCTACAGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGCTACAGGC	Oy 301 AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320 	Oy 321 ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340	Qy       341 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg       360         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Oy 361 GlualaSerProGlySerSerSerGinGlySerValProGluasnGlnTyrGlyLeuPro 380	Oy 381 PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly 400		Oy 421 AspTyrLeulleAsnGlylleTyrValAspile 431	RESULT 5 A4403627 LOCUS AX403627 DEFINITION Sequence 514 from Patent WO0073454.		. <del>.</del>	AUTHORS Ashkenazi, A.J., Baker, K.P., Botstein, D., Desnoyers, L., Eaton, D., Ferrara, N., Gerber, H., Gerritsen, M., Goddard, A., Godowski, P., Grimaldi, C.J., Gurney, A.L., Kljavin, I., Napier, M.A., Pan, J., Paoni, N.F., Roy, M., Stewart, T., Tumas, D., Watanabe, C.K.,	TITLE Sereted and transmembrane polypeptides and nucleic acids encoding the same JOURNAL Patent: WO 0073454-A 514 07-DEC-2000;	Genentech Inc. (US) FEATURES Location/Qualifiers source 1. 2284 /organism="Homo sapiens"	/mol_type="unassigned DNA" /db_xref="taxon:9606" ORIGIN	Alignment Scores: 5.79e-112 Length: 2284 Score: 2211.00 Matches: 431 Percent Similarity: 100.00% Conservative: 0	100.00% 100.00% 6

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E 1 (Dases 1 to 2284)

S Clark,H.F., Gurney,A.L., Abaya,E., Baker,K., Baldwin,D., Brush,J., Chen,J., Chow,B., Chui,C., Crowley,C., Currell,B., Deuel,B., Dowd,P., Eaton,D., Foster,J., Grimaldi,C., Gu,Q., Hass,P.E., Heldens,S., Huang,A., Kim,H.S., Klimowski,L., Jin,Y., Johnson,S., Lee,J., Lewis,L., Liao,D., Wark,M., Robbie,E., Sanchez,C., Schoenfeld,J., Seshagiri,S., Simmons,L., Singh,J., Smith,V., Stinson,J., Vangla,A., Vund, W., Wanalabe,C., Wieand,D., Woods,K., Xie,M. H., Yansutra,D., Yi.S., Yu.G., Yuan,J., Zhang,M., Zhang,Z., Goddard,A., Wood,M.I. and Godowski,P.

The Secreted Protein Discovery Initiative (SPDI), a Large-Scale Effort to Identify Novel Human Secreted and Transmembrane Proteins:
A Bioinformatics Assessment
Connerge Res. 13 (10), 2265-2270 (2003)
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Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
Inc., 1 DNA Way, South San Francisco, CA 94080, USA
Location/Qualifiers
               GluAlaSerProGlySerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
                                                                               PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly
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Homo sapiens clone DNA45410 FFGG316 (UNQ316) mRNA,
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Matches:
Conservative:
Mismatches:
Indels: Gaps: US-10-735-014-83 (1-431) x AY358563 (1-2284) 1126

179 ATCCAGTCATCTTTCTAAGGGAATCAGAGGCAATGAGGCCGTATATACTTCAACTCAA 438 61 GludspCysIleAsnSerCysCysSetThriysAmilleSerGlyAspLysAlacysAsn 80 61 GludspCysIleAsnSerCysCysSetThriysAmilleSerGlyAspLysAlacysAsn 80 61 GludspCysIleAsnTatTCTGTTGTTTCACAAAAAAAATTCAGGGGACAAACAATGTAATCAGGGGACAAACACTGTAATCAGGGGACAAACACTGTAATCAGGGGACAAACACTGTAATCAGGGGACAAACACTGTAATCAGGGGACAAACACTGTAATTTTTTTT	241 ThrProbysProdiaThrLeuLeuProThrAsnalaSerValThrProSerGlyThrSer 260 979 ACTCCAAAGCCGCCACCCTTCTACCCCATGCACTTCTGGGACTTCT 1038 CACCCAAAGCCCGCCACCCTTCTACCCACCTTCTGGGACTTCT 1038 CACCACCACGCCACCCTCTACAGCACCTTCTCAGGACTTCT 1038 CACCACACGCTGCCACCACTTCTCAGGACTTCCACGCT 1038 CACCACACGCTGCCACCACTTCTCAGGACTCCCACG 1098 281 ThrIeuIleSerThrValPheGlnAlaAlaThrThrAspSerLysGlySerLeuGluAlaMetalaThrThr 300 1099 ACCTCATTCTACAGTTTTTACACGGGCTGCGGCTGCCACTCCAAGCAATGGCTACAACA 1158 301 AlaValLeuThrThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320 1159 GCGTTCTGACTACCACCTTCAGGCTGCGGCTGCGGCTGCACCAAGCAAAGGCTACAAACATGAAACTTCAAGCAACATGAAACACTAA 1218 321 LeuSerMetAGAAACTTCAAGCCACACACACACAAAAGAAACACAAA 1218 321 LeuSerMetSerAsnValGluSerSerThrMetAsnThrAspSerLysGlySerLeuGluThrIll 340 1279 CTTTCTATGTCAAATGTGAAACTTTCAACCACACAGGAAACTTCCAAGCAACACACAC
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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oligo capping; fis (full insert sequence)
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AK023622
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SKPTDI SWRDTLSQKFGSSDHLEKLFKMDEASAQLLAVKEKGHSQSSQFSSDQEIAHL
LPENVSALPATVAVASPHTTSATPKPATLLPTNASVTPSGTSQPQLATTAPPVTTVTS
OPPTILISTVYPTRAAATLQAMATTAVLTTTFQAPTDSKGSLETI PFTEI SNLTLNTGN
VYNPTALSWSIVVESTTMKTASWEGREASPGSSSQGSVPENQYGLPFEKWLLIGSLLF
GVLFLVIGLVLGRILSESLRRKRYSRLDYLINGI YVDI "
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| Da xref="GG1:11542503"
| db xref="Locus10:54682"
| trānslation="MFFGGEGSLTYTLVIICFLTLRLSASQNCLKKSLEDVVIDIQSS"
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BEACPLKPAKGLMSYRIITDFPSLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHHTDY
Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A., Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S., Sanchez,A., Miting,M., Madan,A., Young,A.C., Shevchenko,Y., Blouffard,G.G., Blakesley,R.W., Tuouhman,J.W., Green,E.D., Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M., Sutterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E., Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A. intial analysis of more than 15,000 full-length human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be foun through the I.M.A.G.B. Consortium/LiNL at: http://image.llnl.gov Series: IRAK Plate: 33 Row: h Column: 14
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 8922334.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (21-701-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-WGC Project URL: http://mgc.nci.nih.gov
On Aug 25, 2003 this sequence version replaced gi:21542502.
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
Tobhiyuki and Piero Carninci (RIKEN)
Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadandsystemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                     Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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/product="MANSC domain containing 1"
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Matches:
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Mismatches:
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/tissue type="Testis"
/clone_lib="NIH_MGC_97"
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/db_xref="LocusID:54682"
276_.1571
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/organism="Homo sapiens"
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/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /1ab h \overline{o}st = "DH10 \overline{B}"
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I (bases I to 233)

Straubberg, E.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klauener, R.D., Collins, F.S., Wagner, L., Shemmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N. K.,
HOpkins, R.F., Jordan, H., Morce, T., Max, S.I., Wang, J., Haieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Qunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
                                                                                                                                                                                                                                                                                                                                         979 ACTCCAAAGCCCGCCACCCTTCTACCCACCAATGCTTCAGTGACACCTTCTGGGACTTCC 1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1039 CAGCCACAGCTGGCCACCACACCTCTGTAACCACTGTCACTTCTCAGCCTCCCACG 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1219 CCGTTTACAGAAATCTCCAACCTAACTTTGAACACAGGAATGTGTATAAACCCTACTGCA 1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1279 CTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGG 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1339 GAGGCCAGTCCAGGCAGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCA 1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1399 TTTGAAAAAGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGC 1458
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381 PheGluLysTrpLeuLeulleGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400
                                                                            ThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer 260
                                                                                                                                                                                                                                                                                                                                                                                                                                   261 GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrLeuIleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         401 LeuValLeuLeuGlyArglleLeuSerGluSerLeuArgArgLysArgTyrSerArgleu 420
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                                                                                                                                                                                                                                     919 GAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCT 978
                                                                                                                                                                      GluAsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrSerAla
                                           LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421 AspTyrLeuIleAsnGlyIleTyrValAspIle 431
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Qy         341 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 360           Db         1296 CTTTCTATGTCAAATGGAGTCTTCCACTATGAATAAACTGCTTCCTGGGAAGGTAGG 1355           Qy         361 GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro 380           Db         1356 GAGGCCAGTCCAGGCAGTTCTCCCAGGCAGTTCCAGAAAATCAGTACGGCCTTCCA 1415           Qy         381 PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly 400           Db         1416 TTTGAAAAATGGCTTCTTATCGGGTCCTGCTTTTTGGTGTCCTGTTCTTGTTTTTTTT	421 ASPTYTLEUITEASNGTYITETYVALASPILE 431	ACCESSION BD227259.1 GI:33037029 KEYWORDS JP 2002522062-A/20. SOURCE Home sapiens (human) ORGANISM Home sapiens Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Home. AUTHORS Jacobs,K., Mccoy,J.M., Lavallie,E.R., Racie,L.A.C., Evans,C.,	Merberg, D., Treacy, M., Agostino, M.J., Ii, R.J.S., Spaulding, V., Wong, G.G., Clark, H.F. and Fechtel, K.  TITLE Secreted proteins and polynucleotides encoding them JOURNAL Patent: JP 2002522062-A 20 23-JUL-2002;  GENETICS INSTITUTE INC  COMMENT OS Home sapiens (Human)	PF 13-AUG-1999 JP 2000565001 PR 14-AUG-1999 JP 2000565001 PR 14-AUG-1999 US 60/096622,17-AUG-1998 US 60/096815 PR 04-SEP-1998 US 60/09923,23-OCT-1998 US 60/105368 PR 08-JAN-1999 US 60/115234,12-FEB-1999 US 60/119931 PR 11-AUG-1999 US 60/148424 PI KENNETH JACOBS,JOHN M MCCOY,EDWARD R LAVALLIE,LISA A COLLINS	PI RACIE,  PI CHERYL EVANS, DAVID MERBERG, MAURICE TREACY, MICHAEL J AGOSTINO,  PI COBERT J STEININGER II, VIKKI SPAULDING, GORDON G WONG, HILARY F  PI CLARK,  PI KIM FEGITEL  PC CILNIS/09, A61X38/00, A61K39/395, A61K39/395, A61K45/00, A61K48/00  PC A61P7/00,  PC A61P7/00, A61P7/06, A61P7/06, A61P13/00, A61P29/00, A61P35/00, PC	301	FT /organism='Homo sapiens (human)'. FEATURES Location/Qualifiers source 12015 /organism="Homo sapiens" /mol_type="genomic_DNA"	/db_xrel="taxon:9606" ORIGIN Alignment Scores: 6.95e-104 Length: 2015
· ·				,			WY -	
99.95* Indels: 0 Gaps:	396 ATCCAGTCATCTTTCTAAGGGAAATCAGGGCAATGAGCCCATATATACTTCAACTCAA 455 61 GludspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyaspLysAlaCysAsn 80	ProAsnGluGluAlaCysProLeuLysBroAlaLysGlyLeuMetSerTyrArglleIle	141 LeuleuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisRhrAspyrr 160  696 CTCTTACATGGCCAATTTTCACAAGCAGTCACTCCCTAGCCCATCATCACACACA	181 HisLeuGluLysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 200	221 GluAsnValSerAlaLeuProAlaThrValAlaSerProHisThrThrSerAla 240	261 GINProGInLeuAlaThrThrAlaProProValThrThrValThrSerGInProProThr 280	1116 ACCCTCATTTCTACAGGTTTTTACACGGCTGCGGCTACACTCCAAGCAATGGCTACACA 1175 301 AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320 1176 GCAGTTCTGACTACCACCTTTCAGGCACCTACGGACCTGAAAGGCAGCTTAGAAACCATA 1235	321 ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340 

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AlaSerProGlySerSerSer-GlnGlySerValProGluAsnGlnTyrGlyLeuProPh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Sugano et al., , Institute of Medical Science, University
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/dev_stage="adult"
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Macaca fascicularis (crab-eating macaque)
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/organism="Macaca fascicularis"
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Location/Qualifiers
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Macaca fascicularis brain cDNA
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Mammalia; Butheria; Primates;
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        Matches:
Conservative:
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R. Sitel: pMEISS-FL3 (Acc.No. AB009864)
R. Sitel: DraIII (CACTGTGTG)
R. Sitel: DraIII (CACTGTGTG)
R. Sitel: DraIII (CACTGTGTG)
R. Sitel: DraIII (ACCATGTG)
R. Sitel: DraIII sitel of Sicliand Size Selection was synthesized using specific S' and 3' primers and amplified by PCR. The PCR product was digested with Sili and size selection was performed to exclude fragments <1.5kb.The Sfil-digested PCR product was cloned into distinct DraIII sites of pMEISS-FL3. XhoI sites just outside the DraIII sites can be used to isolate the CDNA insert. Libraries
                                                                                                                                                                                                                                                     1081 igaaaaarggcircrrarcggcicccrgcrcrrrggrgriccrgrrccrggrgaraggccr 1140
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clone:QtrA-13483, full insert
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Hashimoto, K., Osada, N., Hida, M., Kusuda, J. and Sugano, S.
Direct Submission
Submitted (27-APR-2001) Katsuyuki Hashimoto, National Institute of Infectious Diseases, Division of Genetic Resources; 23-1, Toyama 1-chome, Shinjuku-ku, Tokyo 162-8640, Japan (E-mail:khashi@nih.go.jp, URL:http://www.nih.go.jp/yoken/genebank/, Tel:81-3-5285-1111(ex.2120), Fax:81-3-5285-1181)
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Catarrhini; Cercopithecidae;
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T CDS (256). (1456).
Location/Qualifiers
                                                                                                                                                         CAGCCACAGCTGGCCACCACATCTCCGCCTGTAACCACTGTCACTTCTCAGCCTCCACC
                                                                                                         ThrLeuIleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr
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| ACCCTCATTTCTACAGGTTTTACACGGGCTGTGGCTACACTCCAAGCAATGGCTACAACA
                                                                                                                                                                                                            ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla
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                     GluAlaSerProGlySerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
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      ThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer
                                                        GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr
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BD155963.1 GI:27861721
JP 2002191363-A/10806.
Homo sapiens (human)
Homo sapiens
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/product="hypothetical protein"
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Db 1364 CTCGTCCTCGGGTAGAATCCTCGGGAATCATCCGCAGGAAACGTTACTCAAGACTG 1423  Qy ' 421 AspTyrLeulleAsnGJYlleTyrValAsple 431  Db 1424 GATTATTCATCAATGGGATCTATGTGGACATC 1456  RESULT 15  AX876122 LOCUS  AX876122 LOCUS  AX876122 LOCUS  AX876122 CCESSION  AX876122 CCESSION	ogai,T., Nishikawa,T., Hayashi,K., Saito,K., Sqiqyama,T., Wakamatsu,A., Nagai,K., Saito,K. 1074617-A. 11027 07-FEB-2001; Sociation for Biotechnology (JP) sociation for Biotechnology (JP) organism="Homo sapiens" c. 2221 organism="Homo sapiens" c. 2221 b. xref="taxon:9606" c. 2459 c. 2450 c. 245	/ COGON BEART   1  / ProteIn id="CAE89131.1"  / db xref="G1:40030859"  / translation="WFFGGEGSLTYTLGIRGNEPVYTSTQEDCINSCCSTKNISGDKA  / translation="WFFGGEGSLTYTLGIRGNEPVYTSTQEDCINSCCSTKNISGDKA  CNILMI FOTRKTRARQPNOYLFFCPNEEACHARGYRITIPPSLTRINESGBLP  QEDSLLHGQFSQAVTPLAHHTDYSKPTDISWFDTLSQKFGSSDHLEKLFKMDBASAQ  LLAYKEKGHSQSQFSSDGRIHLLDFBNVSALPATVANASPHTTSATPKPATLLFPTNA  SVTPGTSQPQLATTAPPVTTYTSQPPTLISTVRATLARAATLQAMATTAPVLTTFQAP  TDSKGSLETIPPTEISNLTLNTGNVYNPTALSMSNVESSTMNKTASWEGREASPGSSS  QGSVPENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYLING  IYVDI"	Alignment Scores: Pred. No.: Score: Score: Pred. Score: Score: Percent Similarity: Best Local Similarity: 92.11\$ Mismatches: Query Match: 6. Gaps: 1.190-101 Length: 2221 S221 S221 Matches: 397 Matches: 92.11\$ Mismatches: 0 Guery Match: 6. Gaps: 1	US-10-735-014-83 (1-431) x AX876122 (1-2221)  QY	Db 304
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Human; secreted and transmembrane protein; PRO; cytostatic; cell death; cancer; chromosomal mapping; gene mapping; tissue typing; diagnostic assay; ss.
Human PRO361 nucleotide sequence SEQ ID NO:514.
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99US-0143048P.
99US-0144758P.
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Godowski PJ; Paoni NF; Wood WI; Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Godd Grimaldi CJ, Gurney AL, Kljavin LJ, Napier MA, Pan J, Paor Roy NA, Stewart TA, Tumas D, Matenabe CK, Williams PM, Wo (GETH ) GENENTECH INC. Zhang Z;

WPI; 2001-032160/04. P-PSDB; AAB65299.

PRO polynucleotides used to produce polypeptides used to target bioactive molecules such as toxins, radiolabels or antibodies, to specific cells, to cause targeted cell death.

Claim 2; Fig 327; 935pp; English

The present invention describes human secreted and transmembrane PRO proteins. The PRO proteins have cytostatic activity. The PRO proteins can be used for targeted delivery of bloactive molecules, such as toxins, radiolabels or antibodies, that cause cell death. PRO nucleotide sequences, and their fragments, can be used as hybridisation probes, in chromosomal and gene mapping, and in the generation of anti-sense RNA and DNA. They may also be used to produce transgenic animals which are used to develop and screen therapeutically useful reagents. The PRO nucleotide and protein sequence can be used for tissue typing and in treating cancer. Anti-PRO antibodies can be used in diagnostic assays. AAF4470 to AAF4470 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAF44687 to AAF44530 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention

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28-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                     Human; secreted and transmembrane protein; cytostatic; anti-HIV; virucide; hepatotropic; antiinflammatory; neuroprotective; gene therapy; PRO; pharmaceutical; diagnostic; biosensor; bioreactor; malignancy; cancer; ovarian cancer; colorectal cancer; Kaposi's sarcoma; leukaemia; lymphoma; hepatitis B; multiple sclerosis; Crohn's disease; drug screening; gene; ss.
         ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla
                                                               CTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGG
                                                                                                       1366 TTTGAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGC
                                                                                                                                                                            LeuValleuLeuGlyArgileLeuSerGluSerLeuArgArglysArgTyrSerArgLeu
                                                  LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg
                                                                                             GluAlaSerProGlySerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
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                                                                                                                                                                                                                                                                                      ACA64519 standard; cDNA; 2284
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97US-0062250P.
97US-0065311P.
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97US-0066770P.
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98US-0083322P.
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DL; Godowski PJ; Paoni NF; Wood WI; Eaton Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton Ferrara N, Fong S, Gerber H, Gerritesen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, Ashkenazi AJ, Baker N, Fong S, Zhang Z;

WPI; 2003-352829/33 P-PSDB; ABU72590.

New genes and secreted and transmembrane polypeptides (e.g. PRO183 or PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's sarcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's disease

Claim 1; Fig 327; 663pp; English.

The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ATCC Deposit No. 209621, 552-PTA, 819-PTA, 209439, 201315, etc); or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma, leukaemia or lymphoma,), hepatitis B, multiple sclerosis, or Crohn's disease in mammals. The PRO polypeptides are useful in drug screening, particularly as targets for therapeutic intervention in these diseases.

The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA.

The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. This sequence encodes a novel human secreted and transmembrane PRO polypeptide 

612 A; 576 C; 464 G; 632 T; 0 U; 0 Other; Sequence 2284 BP;

2284 431 0 0 0 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps: 1.02e-141 2211.00 100.00% 100.00% Percent Similarity: Best Local Similarity: Alignment Scores: Query Match: DB:

(1-2284)US-10-735-014-83 (1-431) x ACA64519

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140	121 ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer 140	н	
585	526 CCCAACGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT	S	
120	101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgllelle 120	н	
525	466 TTGATGATCTTCGACACTCGAAAACGACTAGACAACCCCAACTGCTACCTATTTTCTGT	4,	
100	81 LeuMetIlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPheCys		
465		4	
80	61 GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn	-	
405	346 AFCCAGTCATCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAA 405	Ŕ	
09	41 IleGinSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGln	•	
345	286 CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC	2	
40	21 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspVallYallleAsp		
285		73	
20	1 MetPhePheGlyGlyGluGlySerLeuThrTyrThrLeuValIleIleCysPheLeuThr		

qq	586	ACAGATTTTCCATCTTTGACCAGAAATTTGCCAAGCCAA
à	141	
gg	646	cicitacaideccaaitricacaaccagicaciccciageccaicacacacagariar 705
<u>ک</u> ج	161	SerLysProThrAspIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180
3 &	181	HisteuGlubysLeuPhebysMetAspGluAlaSerAlaGlnLeubeuAlaTyrLysGlu 200
임	166	
ò	, 201	LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGlulleAlaHisLeuLeuPro 220
QQ	826	AAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCTGCCT 885
δ	221	GluAsnvalSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla 240
OD Dp	886	GAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCT 945
8 8	241	ThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer 260
à	261	
Dp	1006	CAGCCACAGCTGGCCACCACACACCTGTAACCACTGTCACTTCTCAGCCTCCCACG 1065
ò	281	ThrLeulleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr 300
д	1066	ACCCICATITCTACAGITITITACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACA 1125
ò	301	AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320
qq	1126	GCAGTICTGACTACCACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATA 1185
δλ	321	
qq	1186	CCGTTTACAGAAATCTCCAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCA 1245
ठे द	341	LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 360
9 8	1240	
දු දු	361	361 GlublaSerbroGlySerSerSerGlnGlySerValProGlubshQln1YTGlyLeRF10 380 
δ	381	PheGluLysTrpLeuLeulleGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400
Q	1366	TTTGAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGGATGGC 1425
ò	401	LeuValLeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
Dp.	1426	CICGICCICCIGGGIAGAAICCITICGGAAICACICCGCAGGAAACGITACTCAAGACIG 1485
à	421	AspTyrLeulleAsnGlylleTyrValAsp11e 431
g	1486	GATTATTTGATCAATGGGATCTAGGGACATC 1518
RESU ABX9 ID	LT 5 6832 ABX96832	standard; cDNA; 2284 BP.
A A	ABX96832	
il x	15-MAY-20	003 (first entry)
E X	uman	encoding
KM	Human; St	s; gene; PRO; secreted protein; transmembrane protein;

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Cornelia de Lange syndrome; gene therapy; immune disorder;
inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defect; premature aging; cardiac injury; AIDS; cancer;
diabetic complication.
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Homo sapiens.

US2002173463-A1

21-NOV-2002

2001US-00944944 31-AUG-2001;

970S-0067411P.
970S-0069234P.
970S-0069335P.
970S-0069425P.
970S-0069694P.
970S-0069696P.
970S-0069873P.
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980S-0074086P.
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980S-0075945P. 2000WO-US003565 2000WO-US004414 99WO-US021090 99WO-US028313 99WO-US028409 99WO-US028301 99WO-US030095 2000WO-US005841 -DEC-1997; 02-MAR-2000; 30-NOV-1999; 30-NOV-1999; FEB-1998 25-FEB-1998 SEP-1998 -JUN-1999 .5-SEP-1999 01-DEC-1999 12-DEC-1997 16-DEC-1997 997 997 997 JAN-1998 11-DEC-1997 11-DEC-1997 -FEB-1

GETH ) GENENTECH INC.

2000WO-US014042.

2000WO-US008439 2000WO-US020710 2000WO-US032678 001WO-US006520 2001US-00866028 Eaton DL, Ferrara N, Filvaroff E; A, Godowski PJ, Grimaldi JC, Gurney AL; Napier MA, Roy MA, Tumas D, Wood WI; Botstein D, Ea E, Goddard A, Kljavin IJ, Baker KP, Bc Gerritsen ME, Hillan KJ,

WPI; 2003-311003/30. P-PSDB; ABU64930.

New transmembrane polypeptides and polynucleotides useful for chromosome identification, tissue typing, gene therapy, in chromosome and gene mapping, or as molecular weight markers.

Claim 2; Fig 31; 172pp; English

The invention relates to an isolated nucleic acid encoding a secreted/transmembrane polypeptide (designated as PRO proteins). 15 PRO polypeptides and their encoding polynucleotides are disclosed. Also included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, a process for producing a PRO polypeptide (by culturing the host cell under conditions for the expression of the PRO polypeptide, and recovering the PRO polypeptide from the cell culture, an isolated polypeptide having at least 80% amino acid sequence identity to the PRO polypeptides, a chimaeric molecule comprising PRO fused to a 

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heterologous amino acid sequence and an antibody which specifically binds to PRO. The PRO nucleotide sequences are useful as hybridisation probes, in chromosome and gene mapping, in generating sense and antisense RNA or DNA, in generating transgenic or knock-out animals which can be used in the development and screening of therapeutically useful reagents, and in gene therapy. The polypeptides may be used as molecular weight markers for protein electrophoresis purposes The PRO polypeptides and nucleic for protein electrophoresis purposes The PRO polypeptides and nucleic PRO241 (identified as Chordin) is a candidate gene for Cornelia de Lange syndrome. Other PRO proteins are variously implicated in immune disorders, inflammatory disease, organ fallure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, cardiac injury, ADS, cancer and diabetic complications. The present sequence encodes a
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345 9 CTAAGGCTGTCTGCTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC 41 IleGlnSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGln 286 g ò

465 405 80 ATCCAGTCATCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAA GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn GAAGACTGCATTAATTCTTGCTGTTCAACAAAAAAACATATCAGGGGACAAAGCATGTAAC 346 61 406 요 ò g

100 Leumet IlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys TTGATGATCTTCGACACTCGAAAACAGCTAGACAACCCAACTGCTACTATTTTTCTGT 81 466 ò d δ

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180 SerLysProThrAsp11eSerTrpArgAspThrLeuSerG1nLysPheG1ySerAsp 161

LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro

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                                                                                                                                          AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320
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                  ThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer 260
                                                          GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr 280
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386 GAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, antiinflammatory; antiarteriosclerotic; cardiant; gynecological;
anti-HIV; cytostatic; antidiabetic; BMP-agonist; BMP-Antagonist;
cytokine-agoniet; cytokine-antagonist; gene-Therapy;
inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defect; premature aging; AIDS; cancer;
diabetic complication; gene; ds.
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97US-0069278P.
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97US-0069355P.
97US-0069425P.
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11-DEC-1997;
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16-DEC-1997;
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LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp 40
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A, Godowski PJ, Grimaldi JC, (
, Napier MA, Roy MA, Tumas D,
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2000WO-US014042.
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2000WO-US032678.
2001WO-US006520.
97US-0069702P.
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ME, Goddard A,
Kljavin IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
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Best Local Similarity:
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Hillan KJ, K
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02-MAR-2000;
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New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
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                                                                                                                                                                                                                                                                                     Gene; ss; human; antiinflammatory; antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic; antidiabetic; transmembrane; antiinflammatory; anti-HIV; antiarteriosclerotic; cardiant; infertility; anti-infertility; cytostatic; antidiabetic; gene therapy; birth defect; inflammatory disease; organ failure; atherosclerosis; cardiac injury; premature aging; AIDS; cancer; diabetic complication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention relates to a nucleotide sequence encoding an isolated secreted and/or transmembrane protein. The nucleotide sequences of the invention may have antiinflammatory, antiarteriosclerotic, cardiant, an infertility, anti-HIV, cytostatic and antidiabbetic activities and may
                                          1426 CTCGTCCTCCTGGGTAGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTG
TTTGAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGC
                         LeuValLeuLeuGlyArglleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu
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Gerritsen ME, Goddard A, Godowski PJ, Grimaldi JC, Gurney ,
Hillan KJ, Kljavin IJ, Napier MA, Roy MA, Tumas D, Wood W
                                                                                cDNA encoding human PRO361 protein.
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2000WO-US008439.
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P-PSDB; ABU57251.
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30-NOV-1999;
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01-DEC-1999;
11-DEC-1999;
11-FEB-2000;
21-FEB-2000;
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         CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC
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used in gene therapy. The nucleic acids and polypeptides are useful for treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, or diabetic complications. The nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, and in generating antisense RNA or DNP polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful in tissue typing. The present sequence represents a nucleic acid sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgllelle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTTACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTAT
                                                                                                                                                                                                                                                                                                                 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValYalIleAsp
                                                                                                                                                                                                                                                                                                                                                                   IleGlnSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGln
                                                                                                                                                                                                                                                                                                                                                                                                                   GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGACTGCATTAATTCTTGCTGTTCAACAAAAACATATCAGGGGACAAAGCATGTAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerLysProThrAspIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisLeuGluLysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu
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                                                                                                                                                                                                                                                                   MetPhePheGlyGlyGluGlySerLeuThrTyrThrLeuVallleIleCysPheLeuThr
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GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr
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                                                                                                                                                                                                                     AlaValLeuThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle
                                                                                                                                                                                                                                                                                                                              ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla
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02-JUN-1998;
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25-FEB-1998;
20-MAR-1998;
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12-NOV-1997;
13-NOV-1997;
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               GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr
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02-MAR-2000; 2000WO-US005841.
0-MAR-2000; 2000WO-US005819.
15-MAR-2000; 2000WO-US00884.
20-MAR-2000; 2000WO-US00884.
17-MAY-2000; 2000WO-US01377.
15-MAY-2000; 2000WO-US01376.
17-MAY-2000; 2000WO-US01376.
17-MAY-2000; 2000WO-US014041.
02-MUN-2000; 2000WO-US014041.
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The present invention relates to the isolation of novel human PRO polypeptides and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, for modulating collogical activities of cells expressing PRO polypeptides, and for modulating conformation of cells expressing PRO polypeptides, and for for identifying agonists or antagonists. The polynucleotide sequences corromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of RRO polypeptides, for generating transgenic animals or knockout animals, to construct hybridisation probes for mapping the construct hybridisation probes for mapping the individuals with genetic disorders, and for the genetic anilysis of individuals with genetic disorders, and for generating probes for RCC identification, as chromosome markers, and for generating probes for RCC sequence encodes a human PRO polypeptide of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site at sequeta.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated PRO polypeptides e.g., PRO826, PRO1068, PRO1184, PRO1346 and PRO1375, which stimulate proliferation of stimulated T-lymphocytes and are therapeutically useful for enhancing immune responses.
                                                                                                                                                                                                                                                                                                                                                    Godowski P.
Paoni NF;
Wood WI;
                                                                                                                                                                                                                                                                                                                                      DL:
                                                                                                                                                                                                                                                                                                                                Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton I Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, I Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;
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Conservative:
Mismatches:
Indels:
Gaps:
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30-MAY-2000; 2000WO-US014941.
28-JUL-2000; 2000WO-US015264.
28-JUL-2000; 2000WO-US022031.
11-AUG-2000; 2000WO-US023522.
23-AUG-2000; 2000WO-US023522.
24-AUG-2000; 2000WO-US03328.
08-NOV-2000; 2000WO-US032678.
10-DEC-2000; 2000WO-US032678.
28-FEB-2001; 2001WO-US019692.
20-JUN-2001; 2001WO-US019692.
29-JUN-2001; 2001WO-US01166.
09-JUL-2001; 2001WO-US011735.
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Best Local Similarity:
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DB:
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CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC 345

LeuArgLeuSerAlaSerGlnAsnCysLeuLysBerLeuGluAspValValIleAsp

21 286 41

226 ATGTTCTTCGGGGGGAGAGAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACA

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ATCCAGTCATCTCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAA 405
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                                            GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn
                                                                             GAAGACTGCATTAATTCTTGCTGTTCAACAAAAACCATATCAGGGGACAAAGCATGTAAC
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Human; 88; gene; PRO; antiinflammatory; antiarteriosclerotic; cardiant; yaprecological; anti-HTV; oytostatic; antidiabetic; inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; acquired immunodeficiency syndromes.
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,, Godowski PJ, Grimaldi JC, Gurney AL;
Napier MA, Roy MA, Tumas D, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human cDNA encoding secreted/transmembrane protein, PRO361
AspTyrLeulleAsnGlylleTyrValAspIle 431
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970S-0069234P.
970S-00693334P.
970S-0069425P.
970S-006964P.
970S-0069702P.
970S-0069702P.
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2000MO-US014042.
2000MO-US020710.
2000MO-US032678.
2001US-00866028.
                                                                                                                                                                                                                       ABX75951 standard; cDNA; 2284
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99US-0146222P.
99WO-US021090.
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98WO-US025108
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98US-0113296P
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99WO-US028409
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99WO-US030095
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2000WO-US005841
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Hillan KJ, Kljavin IJ,
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11-FBB-2000;
22-FBB-2000;
30-MAR-2000;
30-MAR-2000;
31-MAR-2000;
31-MA
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25-FEB-1998;
16-SEP-1998;
01-DEC-1998;
16-DEC-1998;
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28-JUL-1999;
15-SEP-1999;
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16-DEC-1997
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New isolated PRO polypeptide and encoding nucleic acids, useful for the diagnosis and treatment of disorders such as inflammatory disease, atherosclerosis, cardiac injury, infertility, AIDS, cancer and diabetic complications

Claim 2; Fig 31; 171pp; English

The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to and scoring at least 80% positives when compared to any of 15 fully defined sequences of 235-954 amino acids, given in the specification. Also included are: (1) an isolated PRO cincluded are: (1) an isolated PRO control of a cid having at least 80% included are: (1) an isolated PRO control of a cid having at least 80% included are: (1) an isolated PRO control of a cid having at least 80% included are: (1) an isolated PRO control of comprising any of 15 fully defined nuclectide sequences of 957-3441 bp. Comprising any of 15 fully defined nucleotide sequences of 957-3441 bp. Comprising the Roborov 209529, 209527, 209500, 209518, 209528, 209529, 209527, 209570, 209518, 209528, 209529, 209527, 209570, 209518, 209528, 209529, 209527, 209570, 209518, 209528, 209529, 209527, 209570, 209518, 209528, 209529, 209527, 209570, 209518, 209528, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 209529, 20 polypeptide 

Sequence 2284 BP; 612 A; 576 C; 464 G; 632 T; 0 U; 0 Other;

2284 431 0 0 0 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps: 1.02e-141 2211.00 100.00\$ 100.00\$ Best Local Similarity: Percent Similarity: Alignment Scores: Query Match: DB:

405 465 525 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgIleIle 120 585 645 LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr 160 226 ATGTTCTTCGGGGGGAGAAGGGAGCTTGACTTTGGTAATAATTTGCTTCCTGACA 285 286 CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC 345 LeuMetllePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys 100 121 ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer 140 CICITACATGGCCAATTITCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTAT 705 40 9 1 MetPhePheGlyGlyGluGlySerLeuThrTyrThrLeuValllelleCysPheLeuThr 20 61 GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn 80 41 IleGlnSerSerLeuSerLysGlyIleArgGlyAsnGluDroValTyrThrSerThrGln 346 ATCCAGTCATCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATACTTCAACTCAA GAAGACTGCATTAATTCTTGCTGTTCAACAAAAACATATCAGGGGACAAAGCATGTAAC 466 TTGATGATCTTCGACACTCGAAAAACAGCTAGACAACCCAACTGCTACCTATTTTCTGT 526 CCCAACGAGGGAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT 21 LeuArgleuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp US-10-735-014-83 (1-431) x ABX75951 (1-2284) 646 81 101 141 염 a 셤 g ç g ઠ 셤 원 8 ð ò ò à

상 점	161	SerlysProThrAspileSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180 
දු පු	181	HisleuGlulysleuPhelysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 200
\$ Q	201	LysglyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuFro 220 
충 음	221	GlubsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla. 240
ò	4	26
g	946	ACTCCAAAGCCCGCCACCCTTCTACCCACCAATGCTTCAGTGACACCTTCTGGGACTTCC 1008
8 S	261	GINDROGINLEUAlaThrThrAlaProProValThrThrValThrSerGINBroProThr 280
δ	81	0
qq	9	ACCCTCATTICTACAGITITITACACGGGCTGCGGCTACACTCCAAGGAATGGCTACAACA 1125
ර් පි	301	AlavalleuthrthrthrpheGlnAlaProthrAspSerLysGlySerLeuGluthrile 320 
\$ 5	321	ProPheThrGluileSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340 
ò		rMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 36
ф	1246	CTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAACTGCTTCCTGGGAAGGTAGG 1305
ò	361	GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro 380
q	1306	gaggecagrecaggeagricereceaggecagrericeagaaareagraegeeerreca 1365
ò	œ	0
<b>업</b> .	1366	SAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGC 14:
상 원	401	LeuValLeuLeuGlyArgileLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420 
ò	42	4
qq	1486	$\vdash$
REST ABX6 ID	ULT 11 89662 ABX89662	11 ;2 iX89662 standard; cDNA; 2284 BP.
X Z Z	ABX89662;	
<b>1</b>	28-APR-20	03 (first entry)
K E X	cDNA enco	ding novel secreted and transmembrane protein PRO361.
\$ \$	Secreted transgeni	and transmembrane polypeptide, PRO; tissue typing; gene therapy; c; knockout animal; inflammatory disease; organ failure;
<b>2 2 3</b>	atheroscl premature	erosis; cardiac injury; infertility; birth defect; aging; acquired immunodeficiency syndrome; ADDS; cancer;
X X	dlabetic sports-re	complication; immune system disorder; proteoglycan release; lated joint problem; human; articular cartilage defect;

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therapy. (II) is also useful for generating transgenic animals or knockout animals for the development and screening of therapeutically useful reagents. PRO213 polypeptide is useful for treating inflammatory disease, organ failure, atherosclerosis, cardiac injury, infertility. birth defects, premature aging, acquired immunodeficiency syndrome birth defects, premature aging, acquired immunodeficiency syndrome (AIDS), cancer and diabetic complications. The other PRO polypeptides including PRO243, PRO323, PRO327, PRO344, PRO347, PRO354, PRO355, PRO315, PRO351 and PRO346 are useful for treating human disorders involving the immune system. PRO241 is useful for treating human disorders protecylycans from cartilage, and thus for treating sports-related joint problems, articular cartilage defects, ostecarthritis and rheumatoid arthritis. (I) is also useful for inhibiting vascular endothelial cell growth. This sequence encodes a novel human secreted and transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGTTCTTCGGGGGAGAAGGGAGCTTGACTTACACTTTGGTAATATTTGCTTCCTGACA
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                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MetPheGlyGlyGlyGluGlySerLeuThrTyrThrLeuValIleIleCysPheLeuThr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcaaagcccaccaararcrcargaagagacacacrrrrcrcagaagrrragarccrcagar
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Matches:
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                                                                                                                                                                                                                                            BP; 612 A; 576 C; 464 G; 632 T; 0
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated PRO polypeptides e.g. PRO243, PRO299, PRO323, PRO327, PRO344, and polynucleotides useful in the treatment of human disorders related to immune system, and in gene therapy.
 osteoarthritis; rheumatoid arthritis; vascular endothelial cell growth factor stimulated proliferation; endothelial cell growth; VEGF stimulated proliferation; gene; ss.
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,, Godowski PJ, Grimaldi JC, Gurney AL;
Napier MA, Roy MA, Tumas D, Wood WI;
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Gerritsen ME, Goddard A, Godowski
Kliavin IJ, Napier MA,
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97US-0069234P.
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97US-0069425P.
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98US-00216021
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22-MAY-2000;
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-SEP-1998;
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465 100 525 120 585 140 645 160 705 180 765 200 825 220 882 240

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15-MAR-2000;
20-MAR-2000;
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28 MAY - 1998;
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02 - UUN - 1998;
02 - UUN - 1998;
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04 - UUN - 1998;
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pharmaceutical, diagnostic, biosensor, bioreactor, tumour, therapeutic,
colon cancer, lung cancer, breast cancer, cancer, gene therapy.
                GAAAATGTGAGTGCGCTCCCAGCTACGGTGGCAGTTGCTTCTCCACATACCACCTCGGCT
                                                                                     ThrLeuIleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr
                                                                                               ACCCTCATTTCTACAGTTTTTTACACGGGCTGCGGCTACACTCCCAAGCAATGGCTACAACA
                                                                                                                       AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle
                                                                                                                                                         ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla
                                                                                                                                                                   1186 CCGTTTACAGAAATCTCCAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCA
                                                                                                                                                                                            LeuSerwetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg
                                                                                                                                                                                                      GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
                                                                                                                                                                                                                                          GAGGCCAGTCCAGGCAGTTCCTCCCAGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCA
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97US-0062250P.
97US-0065311P.
97US-0065311P.
97US-0066770P.
98US-0075945P.
98US-0078910P.
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25-FEB-1998;
20-MAR-1998;
28-APR-1998;
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The invention discloses isolated PRO secreted/transmembrane polypeptides comprising a sequence without signal peptide and the nucleic acid encoding them. The polypeptide, for linking a bioactive pecifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polymerical activity of a cell. The PRO polypeptides or polymerical activity of a cell. The PRO polypeptides or polymericals, diagnostics, biosensors or bioreactors, for detecting or treating e.g. tumours in mammals, e.g. humans, dogs, cats, cattle, horses, sheep, pigs, goats or rabbits as targets for therapeutic intervention in certain cancers (e.g. colon, lung or breast cancers) and diagnostic determination of the presence of these cancers. The PRO polypeptides are also useful as molecular weight markers or for formonsome identification. The PRO genes are useful as hybridisation probes or for screening libraries of human therapy, particularly for mRNA. The PRO genes may also be used in gene therapy, particularly for mRNA. The PRO genes may also be used in gene therapy, particularly for mRNA. The PRO genes may also be used in gene therapy, particularly for mRNA. The PRO genes encoding, the primers presented in ABX79290-ABX79675 are the genes encoding, the primers mappinglying and the probes detecting the PRO polymelectices of the invention. Note: The sequence date for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html
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Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New secreted and transmembrane PRO polypeptides (e.g. PRO183, PRO184, PRO361 or PRO846) useful as targets for therapeutic intervention in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DL;
Godowski
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Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A,
Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J,
Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM,
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11-AUG-2000; 2000MO-US022031.
23-AUG-2000; 2000WO-US023522.
24-AUG-2000; 2000WO-US03328.
08-NOV-2000; 2000WO-US030952.
01-DEC-2000; 2000WO-US030952.
28-FEB-2001; 2000WO-US0306520.
01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US019692.
29-JUN-2001; 2001WO-US01166.
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P-PSDB; ABU59045.
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                                                                                                                                                                       Novel human secreted and transmembrane protein PRO361 cDNA
ACA93679 standard; cDNA; 2284
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1 MetPhePheGlyGlyGlyGlySerLeuThrTyrThrLeuVall1eIleCysPheLeuThr 20

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            PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly
                                                                LeuValLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu
                                                                                                                                                                                                                                                                                       Novel human secreted or transmembrane protein PRO846 DNA.
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Percent Similarity: 100.004 Missatches: 0  Dosey Match: 1  Dos	Ob         10.66 ACCTCATTTCTACACTGCGGCTGCGGCTACACTCCAAGCAATGGCTACACA 1125           QY         30.1 AlaValLeuThrThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320           Db         1126 GCAGTTCTGACTACCACCTTTCAGGACTCGAAAGGCAGCTTAGAAACCATA 1185           QY         32.1 ProPheThrGluIleSerAsnLeuThrLeuAsnTrdlyAsnValTyrAsnProThrAla 340	
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                                                                                                                     LeuValLeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
                                                                                                                                                                                                                                                                             Human; secreted and transmembrane protein; PRO; nootropic; neuroprotective; antiparkinsonian; cytostatic; gene therapy; chromosome mapping; gene mapping; transgenic animal; knock-out animal; neurodegenerative disorder; Parkinson's disease; Alzheimer's disease;
                          GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
                                                           PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly
                                                                                                1366 TITGAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATAGGC
                                                                                                                                  CTCGTCCTCCTGGGTAGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTG
                 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg
                                                                                                                                                                                                                                                             Novel human secreted and transmembrane protein PRO361 cDNA
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	<b>5</b> 11		leileCya          TAATTTGC	Val	_£	ValTyrThr:	lyAspLys	CAGGGGACAAAG	/sTyrLeuPhePhe	SCTACCTA	LeuMetSerTyrArg	5	ŭ—ŭ	sHisHis'	ATCATCAC	eSerTrpArgAspThrLeuSerGlnLysPheGlyS	AGTTTGGA	SLeuGlulysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 	[eAlaHis]	CTGATCAAGAAATAGCTCATCTGCT	ProHisThrThr	CACATACC	roser	CTTCT	lThrsergln 	aMet	
	228, 431, 000		euValI 	erLeuG.		luProVa        AGCCCG	e -	-4	roAsnCys	CCAACT	lyLeuM	GACTTA	GlnGluLeuF            CAAGAGTTAC	euAlaH	CCTAGCCCA	erGlnL)	CTCAGA	lagini        cccagc	lnGluI	AAGAAA	- 6	-5	ServalThrE	CAGTGA	hrvalti        Chanca	aThrLeuGlnAl	
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6	301	AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320
<del>Q</del>	1126	GCAGTTCTGACTACCACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATA 1185
ò	321	ProPheThrGluileSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340
q	1186	CCGTTTACAGAAATCTCCAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCA 1245
ò	341	LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 360
đ	1246	CTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGG 1305
ò	361	GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro 380
đ	1306	GAGGCCAGTCCAGGCAGTTCCTCCCAGGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCA 1365
ò	381	PheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly 400
đ	1366	TTTGAAAAATGGCTTCTTATCGGGTCCCTGCTCTTTGGTGTCCTGTTCCTGGTGATGGC 1425
ò	401	LeuValLeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
a	1426	CTCGTCCTCCTGGGTAGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTG 1485
ò	421	AspTyrLeulleAsnGly1leTyrValAspIle 431
QQ	1486	GATTATTGATCAATGGGATCTATGTGGACATC 1518

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Sequence 340, App
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CURRENT FILING DATE: 2001-05-25
Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 120
US-09-949-016-17361
US-09-370-838-158
US-08-323-1703-158
US-08-323-1703-11
US-08-323-1703-11
US-08-32-441-1
US-09-614-221A-291
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US-09-437-054A-7
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US-09-437-054A-7
US-08-366-001-13
US-09-326-361B-4
US-08-368-955A-4
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Patent No. 6642360
GENERAL INFORMATION
APPLICANT: Baker, Kevin
APPLICANT: Botstein, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Godowski, Paul
Grimaldi, Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eaton, Dan
Ferrara, Napoleone
Filvaroff, Bllen
Gerritsen, Mary
Goddard, Audrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gurney, Austin
Hillan, Kenneth
                   Roy, Margaret
Tumas, Daniel
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kljavin, Ivar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Napier, Mary
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ORGANISM: Homo Sapien
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-MODEL=frame+ p2n. model -DEV=xlp
-MODEL=frame+ p2n. model -DEV=xlp
-MODEL=frame+ p2n. model -DEV=xlp
-De_cgnz_1/USFTO_spool_D_VGS10735014/runat_26042005_113101_7446/app_query.fasta_1.583
-DB=ISBNGd_PatentE NA -QFNT=fastap -SUFFIX=rni -MINATCH=0.1 -LOOPCH=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MARRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=per -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LCAL -OUTPMT=pto -NORM=ext -HEAPSIZE=560 -MINLEN=0 -MAXLEN=200000000
-USRE=USI0735014 @CGN 1 1.105 @runat_26042005_113101_7446 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NRG=SCORE=s0 - WAIT -DSPBILOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THRRADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOPE - DELEXT=7
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Sequence 412, App
Sequence 13892, A
Sequence 950, App
Sequence 5, Appli
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Sequence 11, Appli
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Sequence 82, Appl
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Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-774-528-230
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Listing first 45 summaries
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Result No.

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Appli

	Db   1366   TTGAAAATGGCTTCTTATCGGGTCCTTCTTTGGTGTCTGTTCCTGGTGATAGGC   1425     Qy	RESULT 2 US-09-944-457-82   S-09-944-457-82   Sequence 82, Application US/09944457   Patent No. 6734288   GENERAL INFORMATION:   APPLICANT: Baker, Kevin   APPLICANT: Eaton, David   APPLICANT: Faton, Dan   APPLICANT: Faton, Dan   APPLICANT: Filvaroff.Ellen	APPLICANT: Gerritsen, Mary APPLICANT: Goddard, Audrey APPLICANT: Goddowski, Paul APPLICANT: Goddowski, Paul APPLICANT: Grimaldi, Christopher APPLICANT: Grimaldi, Christopher APPLICANT: Hilan, Kenneth APPLICANT: Kljavin, Ivar APPLICANT: Napier, Mary APPLICANT: Napier, Mary APPLICANT: Roy, Maryaret APPLICANT: Roy, margaret	JU 1222		; PRIOR PEDLICATION NUMBER: 60/069,870 ; PRIOR FILING DATE: December 17, 1997 ; PRIOR APPLICATION NUMBER: 60/069,873 ; PRIOR FILING DATE: December 17, 1997 ; PRIOR FILING DATE: December 18, 1997 ; PRIOR FILING DATE: December 18, 1997
Score: Percent Similarity: 100.00\$ Conservative: 0 Best Local Similarity: 100.00\$ Mismatches: 0 Cuery Match: 4 Gaps: 0 US-10-735-014-83 (1-431) x US-09-866-028-82 (1-2284)  Oy 1 MetPhePheGlyGlyGlyGlyGlyGlyGrythrTyrThrLeuVallleIleCysPheLeuThr 20	286 CTAAGGCTGTTGTCAGAATTGCCTCAAAAGGGTCTAGAAGATGTTGAC 41 IleGlnSerSerLeuSerLygGlylleArgGlyAsnGluProValTyrThrSerThrGln 346 ATCCAGTCTTTCTAAGGGAATCAGAGGCAATGAGCCGTATATACTTCAACTCAA 61 GluAspCysileAsnSerCySCySSerThrLySAsnIleSerGlyAspLysAlaCySAsn 61 GluAspCysileAsnSerCySCySSerThrLySAsnIleSerGlyAspLysAlaCySAsn 64 GluAspCysileAsnSerCySCASSerThrLySAsnIleSerGlyAspLysAlaCySAsn 66 GAGACTGCATTAATTCTTGCTGTTCAACAAAAACATATCAGGGGAAAAGATTATAGTTAATTCTTGCTGTTAAAACATAAAACATAATAAGAGGAAAGAATAAAACATAATAATTCTTGCTGTTCAACAAAAAACATAACAGGAAAAGATTAATTCTTGCTGTTACAACAAAAAACATAATCAGGGGGAAAAGATAATCAGGGGGAAAAGATAATCAGGGGGAAAAGCATGTAAA	81 LeumetllePheAspThrAtgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys	141 LeuleuHisGlyGlnPheSerGlnAlaValThrProleuAlaHisHisHisHisHisHisHisHisHisGlyGlnPheSerGlnAlaValThrProleuAlaHisHisHisHisHisHisHisBThrAspTyr  141 LeuleuHisGlyGlnPheSerGlnAlaValThrProleuAlaHisHisHisHisHisHisHisHisHisHisHisHisHisH	HisteuGlutysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu	241 241 241 261 1006 281	Qy 301 AlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320   1126 GCAGTTCTGACTTCAGCACCTTTCAGGCACCTACGACTCGAAAGCAGCTTAGAAACCATA 1185   Qy 321 ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340

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645

160 705 180 765 825 220

140

465 100

405 80

1005 1065 1365 CTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGG 1305 1066 ACCCTCATTTCTACAGTTTTTTACACGGGCTGCGGCTACACTCCAAGCAATGGCTACAACA 1125 240 300 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 360 GlualaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro 380 945 PheGluLysTrpLeuLeulleGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400 CCGTTTACAGAAATCTCCAACTTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCA GAGGCCAGTCCAGGCAGTTCCTCCCAGGCAGTGTTCCAGAAAATCAGTACGGCCTTCCA GluAsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla 886 GAAAATGTGAGTGCGCTCCCCAGCTACGGTGCTTCTCCCACATACCACCTCGGCT ThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer 946 ACTCCAAAGCCCGCCACCCTTCTACCCAACCATCAGTGACACCTTCTGGGACTTCC 1006 cadecacaderedeceaceacaderecenteraceaceaceaceace 1126 GCAGTTCTGACTACCACCTTTCAGGCACCTACGGACTCGAAAGGCAGCTTAGAAACCATA ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla AlaValLeuThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr ThrLeulleSerThrValPheThrArgAlaAlaAlaAlaThrLeuGlnAlaMetAlaThrThr 1246 1306 361 381 셤 ò g δ

> US-10-735-014-83 (1-431) x US-09-944-457-82 (1-2284) Н

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Length:
Matches:
Conservative:
Mismatches:
Indels:

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375 AsnGlnTyrGlyLeuProPheGluLysTrpLeuLeuIleGlySerLeuLeuPheGlyVal 394
                                                                                                                                                                                                                                1 AATCAGTACGGCCTTCCATTTGAAAATGGCTTCTTATCGGGTCCCTGCTTTGGTRWC 60
                                                                                                                                                                                                                                                                    LeuPheLeuVallleGlyLeuValLeuLeuGlyArgileLeuSerGluSerLeuArgArg
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Best Local Similarity:
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ORGANISM: Homo
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Pred. No.:
                     Alignment Scores:
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                                                                                                                                                                                                                                                                    395
                                                                                                          Query Match:
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1426 CTCGTCCTCCTGGGTAGAATCCTTTCGGAATCACTCCGCAGGAAACGTTACTCAAGACTG 1485
                                                    LeuValLeuLeuGlyArg1]eLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
                                                                                                                                                                                                                                                                       APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
FILE REPERENCE: 59. US2. REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR PILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SSO ID NO 9897
LENGTH: 295
                                                                                                                                                         1486 GATTATTTGATCAATGGGATCTATGTGGACATC 1518
                                                                                                                         421 AspTyrLeuIleAsnGlyIleTyrValAspIle 431
                                                                                                                                                                                                            US-09-513-999C-9897
; Sequence 9897, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION;
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// LOCATION: 158

COTHER INFORMATION: b=c or g or US-09-513-999C-9897
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LOCATION: 58
OTHER INFORMATION: r=a or
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LOCATION: 69
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LOCATION: 83
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LOCATION: 136
OTHER INFORMATION: r=a
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                                                      401
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61 CIGITCCTRGTGATAGGCCTCRWCCTCCTGGGTAGAATCCTCTCGGAATCACTCCGCAGG 120
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289 AGCATCYCCTTAGCAGCCGCTCTGATCCCTTGGCCAAGCAG---GAGGGAACCATTAGC 345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----IleSerGlyAsp 76
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                                                                                                      121 AAACGKTAMCTCWAGRACTGGATTACTTGATCAATGGBATCTATGTGGACATC 173
                                                         415 LysArg-TyrSerArg-LeuAspTyrLeuIleAsnGlyIleTyrValAspIle
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                                                                                                                                                                                                                                                                                                                       APPLICANT: Rosen et al IIILE OF INVENTION: 98 Human Secreted Proteins
                                                                                                                                                                                                                                                                                                                                                                  TITLE REPERENCE: P2031P1
CURRENT APPLICATION NUMBER: US/09/489,847
CURRENT FILING DATE: 2000-01.24
EARLIER APPLICATION NUMBER: PCT/US9/17130
EARLIER APPLICATION NUMBER: 00/094,657
EARLIER FILING DATE: 1999-07-29
EARLIER FILING DATE: 1999-07-30
EARLIER FILING DATE: 1998-08-05
EARLIER FILING DATE: 1998-08-05
EARLIER FILING DATE: 1998-08-05
EARLIER FILING DATE: 1998-08-05
EARLIER PILING DATE: 1998-08-06
EARLIER PILING DATE: 1998-08-06
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 376
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Patent No. 6476195
GENERAL INFORMATION:
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Oy 100 CysProAsnGluGluAla                 Db 499 GTCCCTAAC	380 ProPheGlulysTrpLeuLeulleGlySerLeulheGlyVal 394	장 점
Db 455 CCTTATCTG	1222	ž 8
Db 407		ପ୍ର
Db 348 AGCCTGAGGAGCTGGCTC Oy 60 GlnGluAspCysIleAsn	1141 AGCCCTGTACCCCCTATGCKT	දි දි
	ThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla ::: :::: :::::::::::::::::::::::	ે ક
Qy 20 ThrLeuArgLeuSerAla :::::     Db 291 AGCATCCCTTAGCAGCA	304 ThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIleProPhe 322 ::::::	රු පු
4-83 (1-431)	284 SerThrvalPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThrAlaValLeu 303 :::   ::   :::	ර් යි
milarity: 34.5 Similarity: 23.2	264 LeualaThrThralaProProvalThrThrValThrSerGlnProProThrThrLeulle 283	<i>&amp;</i> 8
	250 III.ABIALASELVAIIII.ETUSELGIYIII.SELGIII.IZOSII 263 	<u>8</u> 5
; FEATURE: ; NAME/KEY: CDS ; LOCATION: (415)(1764)	CACTCCCC	දුරු දි
; TYPE: DNA ; ORGANISM: Homo sapiens	236 HisThrthrSerAlaThrProbysProAlaThrLeuLeuPro 249	ò
; SOFTWARE: pt_FL_genes Versic; SEQ ID NO 230 ; LENGTH: 1826	216 AlaHisLeuLeuProGluAsnValSerAlaLeuProAlaThrValAlaValAlaSerPro 235	λό da
; FILE REFERENCE: 802 ; CURRENT APPLICATION NUMBER: U ; CURRENT FILING DATE: 2001-01 . NIMBER OF SEO ID NOS: 441	196 LeuAlaTyrLysGluLysGlyHisSerGinSerSerGinPheSerSsrAspGinGlulle 215	රු සි
; APPLICANT: Drmanac, Radoje 1; ITILE OF INVENTION: No. 6743; TITLE OF INVENTION: POLYDEN	697 GGAGGTGCAGCTGATGGTGACCTCCATTGCTCCCACGGCTGTGGCCTCCAGTACGACT 756	QQ
, APPLICANT: Wang, Jian-Rui , APPLICANT: Wang, Dunrui	6	ò
APPLICANT: LIACY, CLUB A. ; APPLICANT: Xue, Yonghong ; APPLICANT: Xue, Aidong J.	156 HisHisThrAspTyrSerLysProThrAspIleSerTrpArgAspThrLeuSerGlnLys 175	ò 6
; APPLICANT: Asundi, Vinod ; APPLICANT: Ren, Feiyan ; APPLICANT: Zhang, Jie	136 ProGlnGluAspSerLeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHis 155	දු පු
; APPLICANT: Zhou, Ping ; APPLICANT: Goodrich, Ryle . ADDIICANT: 1:: Chenchus	: :	qq
	116 SerTyrArglle1leThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeu 135	ò
; Sequence 230, Application US/C; Patent No. 6743619	. 529 GAGGAATGCATCTGTGGAAACAGTTGATAAAAACGTCTGAGGATGTAACCATGGCAGC 588	qa
RESULT 5 US-09-774-528-230	Met	ò
Db 1381 AAGGACTACACCAGGTG	9/ Leurnernecyskroasnaludida.acvskrobeurskroaladysdrycer 114 	<b>3</b>
Qy 415 LysArgTyrSerArgLe	463 AAGCCATGCGCATCCAA GGATCCACG 489	අ
	LysAlaCysAsnLeuMetIlePheAspThr	ò
200 10000000000000000000000000000000000	403 CACCCACAGAGGTGGGACAGCTCTTGTGCTCATTTGGATTTTYTCCTTGTCCTTATCTGA 462	ପ୍ଧ

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laCysProLeuLysProAlaLysGlyLeuMet------ 115
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                                     eudspTyrLeulledsnGlylleTyrValAsp 430
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|rGGACTACTTAATCAACGGGATGTATGCGGAC 1428
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43619el Nucleic Acide and
prides
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Matches:
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; TYPE: DNA ; ORGANISM: Human US-09-949-016-13892	Alignment Scores: 0.000474 Length: 16562 Pred. No.: 157.00 Matches: 106 Score: 33.97\$ Conservative: 55 Percent Similarity: 22.36\$ Mismatches: 176 Query Match: 7.10\$ Indels: 21 DB: 4	5.	DD 6844 TICCACAGGGGCTCTTATCCTTCTCAGAGATCTGTATTCCTCCCTTCCTT
167 SerTrp	778   SerSerAspHisLeu	20 017	PRIOR FILING DATE: 2000-09-08 NUMBER OF SEQ ID NOS: 207012 SOFTWARE: FastSEQ for Windows Version 4.0

Db 367 CCAACACTCACGAGCTGTCCACCTCTCAGGCCGAGAACCAGCAC 414  Qy 144 GlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyrSerLys 162	163 ProThrAspIle-SerTrpArgAspThrLeuSerGlnLysPhe	GGTTGCAGGCGGGACATGGAAACTTTTGAAAACATCAGGGCTGCTGGGGCGCAAGATGTG 59		Db 655 GGTCGGGCAGGTGCTGACCTGCAGCCTGGAGGCTGACCTGCAAGAACGAAC	QY 223 ISERAIALEUPROAlaThrValAlaValAlaSerProHisThrThrSerAlaThrProLy 243	Oy 243 sProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSerGl 261 :::	Qy 261 nProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThrTh 281	OY 281 rLeulleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThrAl 301 ::::::::	Qy 301 aValLeuThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIlePr 321	Qy 321 oPheThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAlaLe 341 ::	Qy 341 uSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArgGl 361	Qy 361 uAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTy 377 :::                ::	377 E 377	Db 1183 C 1183  RESULT 9 US-09-241-581B-5 ; Sequence 5, Application US/09241581B ; GENERAL INFORMATION: , APPLICANT: Massachusetts Institute of Technology	s BI and CJ Pabst lantic Cent
243 sProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSerGlnProGl 2	Oy 263 nLeulaThrThrAlaProProValThrThrValThrSerGlnProProThrTh 281		Db 7138 GGTGACTAACCCCTGTACAATTGCTGCAGCACCTACTACTACTTGAGGTAGCTACTTG 7197  Qy 309AlaProThirSpSerLysGlySerLeuGluThrIle 320  1198 TGTTTCTCCTCCATAGGTCCCATAAGTAACATAGAACCAACTTCCCTGCTGC 7257	321	330 uABNITATGLYABNVALTYZABNPYOTNKALALEUSEFMETSETABNVALGLUSGFSEKTN 1::	350 rMetAsnLysThralaSerTrpGluGlyArgGluAlaSerE 7378 aTTGGTTAAATTTCCACACACAAAAAAAAGACTGTA		щσ	; GENEKAL INFORMATION: ; APPLICANT: Furness, Michael ; APPLICANT: Buchbinder, Jenny ; TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS	; FILE REFERENCE: PA-0041 US ; CURRENT APPLICATION NUMBER: US/09/976,594 ; CURRENT FILING DATE: 2001-10-12 ; PRIOR APPLICATION NUMBER: 60/240,409	FILE FOR THIS DATE: 2000-10-12 NUMBER OF SEQ ID NOS: 1143 SOFTWARE: PERL Program SEQ ID NO 950		0-S	Alignment Scores:  Pred. No.:  Score:  Score:  Score:  Bercent Similarity:  Query Match:  6.87\$  Length:  1297  Matches:  65  Conservative:  60  Mismatches:  111  Query Match:  687\$  Conservative:  687\$  Mismatches:  75  Gaps:  111	10-735-014-83 (1-431) x US-09-976-594-950 (1-1297) 124 ProSerLeuThrArgAsnLeuProSerGlnGluLeuProG

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1298 CTACTACAAGTACAACAACAACAAGAACCACAACAACCACAACAACAAAGAGCCA 1357
                                                                                                                                                    1358 CAACTACAAAGGGAACAACAACCACTAAAAAACCGACAACAACTTCAACAACGCGGAAGC 1417
                                                                                                                                                                                                                                              1418 CAACAACGACTTCAACCACACCAAAGTCTACAACTTCTACAACGTCTACAACTTCAA 1477
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                                                                                                                                                                                                                                                                                       299 hrThrAlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluT 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                              339 hrAlaLeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrp---- 357
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                         239 erAlaThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyT
                                                                                                                                                                                                  roThrThrLeuIleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaT
                                                                                                                                                                                                                                                                                                                                                                            319 hrIleProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProT
                                                                                                             259 hrSerGlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProP
                                                                                                                                                                                                                                                                                                                                1478 CAACACCAACGACAACTACAATAAATGTGTTTACAACAAAGAAA-----
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Patent No. 6429289
GENERAL INFORMATION:
APPLICANT: Krieger, Monty
TITLE OF INVENTION: Class BI Scavenger Receptors
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1100 Peachtree Street, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/265,428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPTRY: USA
ZIP: 30309-4530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31,284
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: M
TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (404) 815-6555
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2032 base pairs
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STRANDEDNESS
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STREET: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166 eSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAspHisLeuGluLysLeuPh 186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GlnGluIleAlaHis-LeuLeuProGluAsnValSerAlaLeuProAlaThrV
                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
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69
37
108
80
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Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/241,581B
FILING DATE: 02-F6-1999
CLASSIFICATION: 4Uhriown>
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: 31,284
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1926 encode the amino acid sequence
for the Drosophila Melanogaster
Scavenger Receptor Class CI."
NCE DESCRIPTION: SEQ ID NO: 5:
1201 West Peachtree Street
                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (404) 873-8794
TELEFAX: (404) 873-8795
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc. feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 2032 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 40..1926
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
BANTI-SENSE: NO
FEATURE:
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23.47%
6.69%
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                                                                                       ZIP: 30309-3450
                                           Georgia
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Best Local Similarity:
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4 9 4 53	; Sequence 5, Application PC/TUS9507721 ; GENERAL INFORMATION: ; GENERAL INFORMATION: ; TITLE OF INVENTION: Class BI and CI Scavenger Receptors ; TITLE OF INVENTION: Class BI and CI Scavenger Receptors ; CORRESPONDENCE ADDRESS: ; ADDRESSE: Patrea L. Pabst ; STREET: 2800 One Allantic Center ; STREET: 1201 West Peachtree Street	CITY: Atlanta  STATE: Georgia  COUNTRY: USA  ZIP: 30309-3450  COMPUTER READABLE FORM:  MEDIUM TYPE: Floppy disk  COMPUTER: IBM PC compatible  OPERATING SYSTEM: PC-DOS/MS-DOS  SOFTWARE: PatentIn Release #1.25	; CURRENT APPLICATION DATA: ; APPLICATION NUMBER: PCT/US95/07721 ; FILING DATE: ; CLASSIFICATION: ; ATTORNEY/AGENT INFORMATION: ; NAME: Pabet, Patrea L.	TRATION N ENCE/DOCK MUNICATIC HONE: (4 AX: (404 AX: ROK SE	LENGTH: 2032 base pairs   TYPE: nucleic acid   STRANDEDNESS: double   TOPOLOGY: linear   MOLECTLE TYPE: CDNA   HYPOTHETICAL: NO   ANTI-SENSE: NO	FEATURE:  NAMB/KEY: misc. feature  LOCATION: 40.1926  OTHER INFORMATION: /Function = "Nucleotides 40 through OTHER INFORMATION: 1926 encode the amino acid sequence OTHER INFORMATION: for the Drosophila Melanogaster OTHER INFORMATION: Scavenger Receptor Class CI."  PCT-US95-07721-5	Alignment Scores: 9.8e-05 Length: 2032 Pred. No.: 148.00 Matches: 69 Percent Similarity: 36.05\$ Conservative: 37 Best Local Similarity: 23.47\$ Mismatches: 80 DB: 5 Gaps: 9	US-10-735-014-83 (1-431) x PCT-US95-07721-5 (1-2032)  QY
TOPOLOGY: linear  MOLECULE TYPE: CDNA  HYPOTHETICAL: NO  ANTI-SENSE: NO  FEATURE:  NAME/KEY: misc. feature  LOCATION: 401926  OTHER INFORMATION: /Function = "Nucleotides 40 through 1926 encode the amino aci	t Scores: Similarity: al Similarity: tch:	US-10-735-014-83 (1-431) x US-08-265-428-5 (1-2032)  QY	Qy 186 eLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGluLysGlyHisSerGlnSe 206		Qy 230 alAlaValAlaSerProHisThr	hrSerGlnProGlnLeualaThrThrAlaProProValThrThrValThrSerGlnProP	Qy 299 hrThralaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluT 319	Oy 339 hrAlaLeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrp 357

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Best Local Similarity:
Query Match:
                   Tre: DNA
ORGANISM: Human
                                                                                                 US-09-949-016-12147
                                                                                                                                                                        Percent Similarity:
767677
                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                           126
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Fatent No. 6812339
GENERAL INFORMATION:
FAPLICANT: VENTER, J. Craig et al.
GENERAL INFORMATION:
FITLE OF INVERTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVERTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVERTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
CURRENT APPLICATION NUMBER: 00/241,755
FRIOR APPLICATION NUMBER: 60/241,755
FRIOR FILING DATE: 2000-10-20
FRIOR FILING DATE: 2000-10-30
FRIOR FILING DATE: 2000-10-30
FRIOR FILING DATE: 2000-09-08
FRIOR FILING DATE: 2000-09-08
SOFTWARE: FASESEQ FOR WINDOWS VERSION 4.0
SEQ ID NO 12147
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                               1357
                                                                                                1118 GATGTGGATGTAATGACGAGTGCCTTTCGGATGAGACTTGTTGCCTAAACTATTTGGAGG 1177
                                                                                                                                             .238 TCACATCAACAÁGCACAAGCÁCTACGAGGAAGTCAACAACAACAACAACAACAAGCÁGÁA 1297
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|1418 CAACAACAACGACTTCCAACCACCAAAGTCTACAACTTCTACAACGTCTACAACTTCAA 1477
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                                                                                                                                                                                                                                             erAlaThrProLysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyT 259
                                                                                                                                                                                                                                                                                                                                                                                                                      hrThrAlaValLeuThrThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluT 319
          eLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGluLysGlyHisSerGlnSe 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                alProGluAsnGlnTyrGlyLeuProPheGluLysTrpLeuLeulleGlySerLeuLeuP 392
                                                                                                                                                                                                                                                                                                      hrSerGlnProGlnLeuAlaThrThrAlaProProValThrValThrSerGlnProP
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                                                                                                                           -----GlnGluIleAlaHis-LeuLeuProGluAsnValSerAlaLeuProAlaThrV
                                                                                                                                                                                                                                                                        298 CTACTACAAGACAACAACTAAAAAGGCCAACCACAACCACAACAACAACAAGGCCA
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OTHER INFORMATION: n = A,T,C or
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APPLICANT: Reed, Steven G.
APPLICANT: Lodes, Michael J.
APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Roadoh
APPLICANT: Mohamath, Roadoh
TITLE OF INVENTION: COMPOUNDS FOR THERAPY AND DIAGNOSIS OF
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
TITLE OF INVENTION NUMBER: US/09/370,838
CURRENT APPLICATION NUMBER: US/09/370,838
CURRENT FILING DATE: 1999-08-09
EARLIER APPLICATION NUMBER: US/09/285,323
EARLIER FILING DATE: 1999-04-02
NUMBER OF SEQ ID NOS: 289
SOFTWARE: FastSEQ for Windows Version 3.0
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Patent No. 6444425
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                                                                                                                        JAPELICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL0.01307

CURRENT APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-03

PRIOR PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 17561

LENGTH: 767677
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752606 CACCCCACAGCCACCGTGTAC --- CCCACGGCC 752577
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                                                                           Sequence 17361, Application US/09949016
Patent No. 6812339
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US-09-949-016-17361
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263 GlnLeuAlaThrThrAlaProProValThrThrValThrSerGln :::   :::      :::       :::	0y   305 ThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle 320	Qy         349 SerThrMetAenLysThrAlaSerTrpGluGlyArgGluAlaSerProGlySerSerSer 368           ::                                  ::                                Db         1513 GCCACT			
278 ProprothrThrLeulleSerThrValPheThrArgAlaAlaThrLeuGlnAlaMet	Qy         321 ProPheThrGlulleSerAsnLeuThrLeuAsnThr	Qy 369 GlnGlySer-ValProGluAsnGlnTyrGlyLeuProPheGluLys 383	APPLICANT: Mohamath, Raodoh APPLICANT: Henderson, Robert A. APPLICANT: Henderson, Darin R. APPLICANT: Benson, Darin R. APPLICANT: Benson, Darin R. APPLICANT: Gerist, Heather ITILE OF INVENTION: COMPOSITIONS AND METHODS FOR ITILE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER ITILE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CANCER ITILE OF INVENTION WHERE: US/09/854,133 CURRENT APPLICATION NUMBER: US/09/854,133 CURRENT PILING DATE: 2001-05-11 MUMBER OF SEQ ID NOS: 735 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 158 LENGTH: 2114 TYPE: DNA CORGANISM: Homo Bapien US-09-854-133-158	ignment Scores: 0.00019 Length: 2114  ore: 145.50 Matches: 63  rcent Similarity: 40.74\$ Conservative: 25  st Local Similarity: 29.17\$ Mismatches: 66  ery Match: 4 Gaps: 9  -10-735-014-83 (1-431) x US-09-854-133-158 (1-2114)	Oy 204 SerGluBerSerSerAspGlnGluIleAlaHisLeuLeuPrGluAsnVal 223

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US-09-989-727-514

US-09-984-457-82

US-09-994-457-82

US-09-994-587-82

US-09-945-587-82

US-09-945-514-82

US-09-945-015-82

US-09-944-432-82

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US-09-997-653-514
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Patent No. US20020058309A1
GENERAL INFORMATION:
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Grimaldi, Christopher
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Filvaroff, Ellen
Gerritsen, Mary
Goddard, Audrey
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APPLICANT: Botstein, David
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                                                     Gurney, Austin
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Roy, Margaret
Tumas, Daniel
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-MODEL=frame+-pll.model -DEV=xlp
-C-cgnz 1/USPTO spool p/US10735014/runat_26042005_113103_7512/app_query.fasta_1.583
-DS-Published Applications NA -QFWT=fastap -SUFFIX=rnpb -MINNATCH=0.1
-LOOPELST=0 -UNITS=bits -START=1 -RND=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFWT=pcto -NORM=ext -HEAPGTZE=500 -MINLEN=0
-MAXLEN=2000000000 -USBR=US10735014 @CGN 1, 1 723 @runat 26042005 113103_7512
-NCPU=5 -ICPU=3 -NO MMAP -LARGEQUERY -NEG GCORES=0 -MAIT -DSPBLOGCK=100
-LONGLOG -DEV TIREOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPEOP=6 -FGAPEXT=7 -YGAPED=0 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                              April 26, 2005, 23:55:07; Search time 644 Seconds (without alignments) 4063.079 Million cell updates/sec
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Wood, William I.
APPLICANT: Sandy, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REPERENCE: P2730p10163
CURRENT APPLICATION NUMBER: US/09/989,722
CURRENT FILING DATE: 2001-11-19
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                                                         GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSerGlnProProThr
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Patent No. US20020072067A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
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Gurney,Austin L.
Kljavin,Ivar J.
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Paoni, Nicholas F.
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Botstein, David
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APPLICANT: WOOD, William
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P2548PLCI
CURRENT APPLICATION NUMBER: US/09/866,028
CURRENT FILING DATE: 2001-05-25
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 120
SEQ ID NO 82
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US-09-866-028-82
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Grimaldi, J. Christopher
Gurney, Austin L.
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Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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Fong, Sherman
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Gerritsen, Mary E.
Goddard, Audrey
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Desnoyers, Luc
Eaton, Dan I.
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APPLICATION NUMBER: 60/089908
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FILING DATE: 1998-06-19
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FILING DATE: 1998-06-22
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APPLICATION NUMBER: 60/090349
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APPLICATION NUMBER: 60/090355
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APPLICATION NUMBER: 60/090429
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APPLICATION NUMBER: 60/090431
FILING DATE: 1998-06-24
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090472
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090542
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APPLICATION NUMBER: 60/090557
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FILING DATE: 1998-06-25
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   ITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic ITLE OF INVENTION: Acids Encoding the Same
                                                                                                     TILLE OF INVENTION ACAIDS ENCOAING THE SAME
THILE OF INVENTION WINNER: US/09/989,723
CURRENT PLING DATE: 1937-06-16
PRIOR FILING DATE: 1937-06-16
PRIOR FILING DATE: 1937-11-13
PRIOR PLILOR DATE: 1937-11-13
PRIOR FILING DATE: 1937-11-13
PRIOR FILING DATE: 1937-11-13
PRIOR FILING DATE: 1937-11-13
PRIOR FILING DATE: 1937-11-13
PRIOR PLILOR DATE: 1937-11-13
PRIOR PLILOR DATE: 1937-11-13
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PRIOR PLILOR DATE: 1937-11-13
PRIOR PAPLICATION NUMBER: 60/06531
PRIOR PLILOR DATE: 1937-11-13
PRIOR APPLICATION NUMBER: 60/07545
PRIOR PLILOR DATE: 1938-02-25
PRIOR PLILOR DATE: 1938-02-25
PRIOR PLILOR DATE: 1938-02-25
PRIOR PLILOR DATE: 1938-06-03
PRIOR PLILOR DATE: 1938-06-03
PRIOR PLILOR DATE: 1938-06-03
PRIOR PLILOR DATE: 1938-06-03
PRIOR PLILOR DATE: 1938-06-04
PRIOR PLILOR DATE: 1938-06-05
PRIOR PLILOR DATE: 1938-06-05
PRIOR PLILOR DATE: 1938-06-06
PRIOR PLILOR DATE: 1938-06-06
PRIOR PLILOR DATE: 1938-06-07

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APPLICATION NUMBER: 60/088824
FILING DATE: 1998-06-10
Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
                                                          Zemin
                                                          Zhang,
                                       PPLICANT:
                                                          APPLICANT:
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                                  CACCTGGAGAAACTATTTAAAGATGGATGAAGCAAGCAGCCCCAGCTCCTTGCTTATAAAGGAA
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Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
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Patent No. US20020072496A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Botstein, David
APPLICANT: Baton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Ferrara, Napoleone
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerber, Hanspeter
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           DR PELICATION NUMBER: 60/090690
DR FILING DATE: 1998-06-25
DR FILING DATE: 1998-06-25
DR PELING DATE: 1998-06-25
DR APPLICATION NUMBER: 60/090695
DR PILING DATE: 1998-06-25
DR APPLICATION NUMBER: 60/090695
DR FILING DATE: 1998-06-25
DR FILING DATE: 1998-06-26
DR PILING DATE: 1998-06-26
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R FILING DATE: 1998-07-02
R APPLICATION NUMBER: 60/091544
R FILING DATE: 1998-07-01
R FILING DATE: 1998-07-02
R FILING DATE: 1998-07-02
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R FILING DATE: 1998-07-07
R APPLICATION NUMBER: 60/091982
R FILING DATE: 1998-07-07
R APPLICATION NUMBER: 60/092182
R FILING DATE: 1998-07-09
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APPLICATION NUMBER: 60/091633
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PILLING DATE: 1998-06-17
APPLICATION NUMBER: 60/089598
APPLICATION NUMBER: 60/089598
FILLING DATE: 1998-06-17
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FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089600
FILING DATE: 1998-06-17
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FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089801
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APPLICATION NUMBER: 60/089908
FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/089947
                                                         APPLICATION NUMBER: 60/088742
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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088858
FILING DATE: 1998-06-11
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FILING DATE: 1998-06-11
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APPLICATION NUMBER: 60/089948
FILING DATE: 1998-06-19
APPLICATION NUMBER: 60/089952
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APPLICATION NUMBER: 60/090254
FILING DATE: 1998-06-22
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FILING DATE: 1998-06-23
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APPLICATION NUMBER: 60/090431
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APPLICATION NUMBER: 60/090444
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FILING DATE: 1998-06-24
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CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
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APPLICATION NUMBER: 60/088655
FILING DATE: 1998-06-09
APPLICATION NUMBER: 60/088734
Grimaldi, J.Christopher
Gurney, Austin L.
                                                                                                                                                                     Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
Zhang, Zemin
                                                                                                               Roy, Margaret Ann
Stewart, Timothy A
Tumas, Daniel
                                                                                             Paoni, Nicholas F
                                       Cljavin, Ivar J
                                                           Napier, Mary A.
                                                                             Pan,James
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CCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT
                                                                       LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr
                                                                                                                                                      CTCTTACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTAT
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Sequence 514, Application US/09989727
Patent No. US200200072497A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
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             R FILING DATE: 1998-06-24

R APPLICATION NUMBER: 60/090542

R FILING DATE: 1998-06-24

R FILING DATE: 1998-06-24

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R APPLICATION NUMBER: 60/090676

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R FILING DATE: 1998-06-26

R APPLICATION NUMBER: 60/091478

R FILING DATE: 1998-07-01

R APPLICATION NUMBER: 60/091544

R FILING DATE: 1998-07-02

R PILING DATE: 1998-07-02

R APPLICATION NUMBER: 60/09154

R FILING DATE: 1998-07-02

R APPLICATION NUMBER: 60/091626

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R APPLICATION NUMBER: 60/091633

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FILING DATE: 1998-07-07
APPLICATION NUMBER: 60/092182
FILING DATE: 1998-07-09
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FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090431
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APPLICATION NUMBER: 60/088655
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APPLICATION NUMBER: 60/088738
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FILING DATE: 1998-06-17
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FILING DATE: 1998-06-18
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APPLICATION NUMBER: 60/090254
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APPLICANT: Zhang, Zemin
IITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
IITLE OF INVENTION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: P2730P1C65
CURRENT APPLICATION NUMBER: US/09/989,727
CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
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RIOR APPLICATION NUMBER: 60/06526

RRIOR APPLICATION NUMBER: 60/065186

RRIOR APPLICATION NUMBER: 60/065311

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RRIOR FILING DATE: 1997-11-13

RRIOR FILING DATE: 1997-11-13

RRIOR RILING DATE: 1997-11-24

RRIOR APPLICATION NUMBER: 60/065311

RRIOR APPLICATION NUMBER: 60/075945

RRIOR RILING DATE: 1998-02-25

RRIOR RILING DATE: 1998-02-26

RRIOR FILING DATE: 1998-02-26

RRIOR RILING DATE: 1998-02-28

RRIOR RILING DATE: 1998-05-07

RRIOR FILING DATE: 1998-06-02

RRIOR FILING DATE: 1998-06-03

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RRIOR FILING DATE: 1998-06-03

RRIOR FILING DATE: 1998-06-03

RRIOR APPLICATION NUMBER: 60/08759

RRIOR FILING DATE: 1998-06-03

RRIOR APPLICATION NUMBER: 60/08802

RRIOR FILING DATE: 1998-06-04

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APPLICATION NUMBER: 60/088030
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APPLICATION NUMBER: 60/088033
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APPLICATION NUMBER: 60/088167
                                                                                                                                                                Grimaldi, J. Christopher
Gurney, Austin L.
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Williams, P. Mickey
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                                                         'errara,Napoleone
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Stewart, Timothy
Tumas, Daniel
                                                                                                               Gerritsen, Mary E
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                                                                                             Gerber, Hanspeter
                                                                                                                                                                                                       Kljavin, Ivar J
                                                                                                                            Goddard, Audrey
                                                                                                                                                                                                                        Napier, Mary A.
                                                                                                                                                   Godowski, Paul
                                                                          Fond, Sherman
                                      aton, Dan L.
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406 GAACACTGCATTAATTCTTGCTGTTCAACAAAACATATCAGGGGACAAAGCATGTAAC 465 81 LeumetllePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys 100 466 TTGATGATCTTCGACACTCGAAAACAGCTGGAACGCTAACTGTTATTTTTCTGT 525 101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeumetSerTyrArgIleTle 120 526 CCCAACHGLIAIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	161 SerLysProThrAspileSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180 706 TCAAAGCCCACCATATCTCAGAAGACACTTTCTCAGAAGTTTGGATCCTCAGAT 765 181 HisLeuGluLysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 200 766 CACCTGGAGAACTATTTAAGATGGATGAAGCAGTGCCAGCTCCTTGCTTAAAGGA 825 201 LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro 220 826 AAAGGCCATCTCAGAGTTCACAATTTTCCTCTGATCAAGAAATACTCATCATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG	ACTCCAAAGCCGCCACCTTCTACCCACCAATGCTTCAGTGACATCTTGGGGACTTCC GINProGInLeuAlaThrThrAlaProProValThrThrValThrSerGInProProThr CICIAL CONTROL CACCTCTCACCCACTGTAACCACTCTTCTGGGCACTCCCACGCGCCACGCGCACGCCACCTGTAACCACTTTTTTTCTAGGCTACTTTTTTTT	321 ProPheThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340 1186 CCGTTACAGAAATCTCCAACTTGACACAGGGAATGTGTATAACCCTACTGCA 1245 341 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg 360 1246 CTTTCTATGTCAATGGAGTCTTCCACTATGATAAAACTGCTTCCTGGAAGGTAGG 1305 361 GluAlaSerProGlySerSerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro 380 1306 GAGGCCAGTCCAGGAGTTCCTCCCACTATGATAAACTGCTTCCTGGAAGAAGTAGG 1305 381 PheGluLySTrpLeuLeuIleGlySerLeuLeuPheGlyValLeuPheLeuValIleGly 400 1366 TTTGAAAAATGGCTTCTTATCGGGCCCTTTTGGTGTCCTGGTGTCCTGGTGATAGGC 1425 401 LeuValLeuLeuGlyArglleLeuSerGluSerLeuArgArgLySArgTyrSerArgLeu 420 1426 CTCGTCCTCCTGGGAAGTCCTTTCGGAATACACTGCTGGTAAAGGC 1425 41 LeuValLeuLeuGlyArglleLeuSerGluSerLeuArgArgLySArgTyrSerArgLeu 420 1426 CTCGTCCTCCTGGGTAAGATGATACACTCCGGAGGAAACTGTTACTAAGACTG 1485 421 AapPyrLeuIlaAsnGlylleTyrValAspIle 431
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PRIOR FILING DATE: 1998-06-24   PRIOR APPLICATION NUMBER: 60/09044   PRIOR FILING DATE: 1998-06-24   PRIOR FILING DATE: 1998-06-24   PRIOR FILING DATE: 1998-06-24   PRIOR FILING DATE: 1998-06-24   PRIOR APPLICATION NUMBER: 60/090472   PRIOR FILING DATE: 1998-06-24   PRIOR APPLICATION NUMBER: 60/090535   PRIOR FILING DATE: 1998-06-24   PRIOR PRILING DATE: 1998-06-24   PRIOR APPLICATION NUMBER: 60/090557   PRIOR APPLICATION NUMBER: 60/090576   PRIOR APPLICATION NUMBER: 60/090676   PRIOR APPLICATION NUMBER: 60/090676		PRIOR	Alignment Scores:  Alignment Scores:  Pred. No.:  Score:  Score:  100.00\$  Conservative:  0  Best Local Similarity:  100.00\$  Misnatches:  0  Query Match:  100.00\$  Misnatches:  0  Conservative:  0  Misnatches:  0  Conservative:  0  Misnatches:  0  Conservative:  0  Matches:  0  Misnatches:  0  Conservative:  0  Matches:  0  Misnatches:  0  Conservative:  0  Matches:  0  Matches:

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226 AIGTTCTTCGGGGGGAGAAGGGAGCTTGACTTTACACTTTGGTAATAATTTGCTTCCTGACA 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgIleIle 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuArgleuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                466 TIGATGATCTTCGACACTCGAAAAACAGCTAGACAACCCCAACTGCTACCTATTTTCTGT
PRIOR FILING DATE: December 22, 1998
PRIOR APPLICATION NUMBER: 09/254,311
PRIOR APPLICATION NUMBER: 09/254,311
PRIOR PILING DATE: March 3, 1999
PRIOR PILING DATE: June 22, 1999
PRIOR PILING DATE: June 21, 1999
PRIOR FILING DATE: TOWN NUMBER: PCT/US99/28409
PRIOR FILING DATE: NO: US20020102647Alember 30, 1999
PRIOR FILING DATE: NO: US20020102647Alember 30, 1999
PRIOR PRILING DATE: NO: US20020102647Alember 30, 1999
PRIOR PRILING DATE: NO: US20020102647Alember 30, 1999
PRIOR PRILING DATE: NO: US20020102647Alember 30, 1999
PRIOR FILING DATE: December 1, 1999
PRIOR FILING DATE: PEDRUARY 11, 2000
PRIOR FILING DATE: FEBRUARY 21, 2000
PRIOR PRIOR APPLICATION NUMBER: PCT/US00/05411
PRIOR FILING DATE: FEBRUARY 22, 2000
PRIOR PRIOR APPLICATION NUMBER: PCT/US00/06411
PRIOR FILING DATE: March 2, 2000
PRIOR PRIOR DATE: March 3, 2000
PRIOR FILING DATE: March 30, 2000
PRIOR PRIOR PRIOR NUMBER: PCT/US00/20710
PRIOR PRIOR APPLICATION NUMBER: PCT/US00/20710
PRIOR PRIOR PRIOR DATE: May 22, 2000
PRIOR PRIOR APPLICATION NUMBER: PCT/US00/20710
PRIOR PRIOR PRIOR DATE: May 22, 2000
PRIOR PRIOR PRIOR DATE: May 22, 2000
PRIOR PRIOR PRIOR DATE: May 22, 2000
PRIOR PRIOR DATE: May 22, 2000
PRIOR PRIOR PRIOR DATE: May 28, 2000
PRIOR PRIOR PRIOR DATE: PEDRUARY 28, 2000
PRIOR PRIOR PRIOR DATE: PEDRUARY 28, 2001
PRIOR PRIOR PRIOR DATE: PEDRUARY 28, 2001
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Matches:
Conservative:
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; ORGANISM: Homo Sapien
US-09-944-449-82
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Best Local Similarity:
Query Match:
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LENGTH: 2284
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APPLICANT: Wass, Daniel

TITLE OF INVENTION: SECRETE DA DE TRANSMERRANE POLYPEPTIDES AND NUCLEIC

FILE REPERENCE: P2548711

CURRENT FAILG DATE: 2001-09-26

REIOR FILING DATE: 2001-09-26

PRIOR PILLING DATE: December 11, 1997

PRIOR PILLING DATE: December 16, 1997

PRIOR PILLING DATE: PED-LUALY 9, 1998

PRIOR PILLING DATE: PED-LUALY 9, 1998
               1486 GATTATTTGATCAATGGGATCTATGTGGACATC 1518
                                                                                                  -09-944-449-82
Sequence 82, Application US/0994449
Patent No. US20020102647A1
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Grimaldi, Christopher
Gurney, Austin
Hillan, Kenneth
                                                                                                                                                                                                                                                                                                               Ferrara,Napoleone
Filvaroff,Ellen
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APPLICANT: Botstein, David
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Goddard, Audrey
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2730P1G70 CURRENT APPLICATION NUMBER: US/09/989,731
CURRENT FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/062260
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-11-12
PRIOR FILING DATE: 1997-11-12
PRIOR PLING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/065311
PRIOR PLING DATE: 1997-11-24
PRIOR PLING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/06770
PRIOR PILING DATE: 1997-11-24
PRIOR PILING DATE: 1998-02-25
PRIOR APPLICATION NUMBER: 60/078910
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-20
PRIOR PILING DATE: 1998-03-00
PRIOR PILING DATE: 1998-05-07
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APPLICATION NUMBER: 60/087759
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APPLICATION NUMBER: 60/087827
FILING DATE: 1998-06-03
APPLICATION NUMBER: 60/088021
FILING DATE: 1998-06-04
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FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088029
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APPLICATION NUMBER: 60/088030
FILING DATE: 1998-06-04
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                                                                                                                    Godowski, Paul J.
Grimaldi, J. Christopher
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Watanabe, Colin K.
Williams, P. Mickey
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Stewart, Timothy .
Tumas, Daniel
         Ferrara, Napoleone
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                                                                         Gerritsen, Mary E
                                                                                                                                                                                                                                                             Paoni, Nicholas F
                                                      Gerber, Hanspeter
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Napier, Mary A.
                                                                                                 Goddard, Audrey
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                                                                                                                                                                 SerlysProThrAspIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180
                                                                                                                                                                                                                                                                                                                                                                            GluAsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla 240
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                                                                         LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr 160
                                                                                                                 CICITACATGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTAT 705
                                                                                                                                                                                                              TCAAAGCCCACCGATATCTCATGGAGACACACTTTCTCAGAAGTTTGGATCCTCAGAT 765
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1486 GATTATTTGATCAATGGGATCTATGTGGACATC 1518
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Patent No. US20020103125A1
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APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Besnoyers, Luc
APPLICANT: Eaton, Dan L.
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FILING DATE: 1998-06-05 APPLICATION UNDRER: 60/088202 FILING DATE: 1998-06-05 APPLICATION NUMBER: 60/088212

PRIOR PRIOR

APPLICATION NUMBER: 60/088167

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1998-06 NUMBER: 1998-06 NUMBER: 1998-06 NUMBER: 1998-06 NUMBER: 1998-06 NUMBER: 1998-06		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
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PRIOR APPLICATION NUMBER: 60  PRIOR FILING DATE: 1998-06-2  PRIOR FILING DATE: 1998-06-2  PRIOR FILING DATE: 1998-06-2  PRIOR PREDICATION NUMBER: 60  PRIOR PRIOR DATE: 1998-06-2  PRIOR PRING DATE: 1998-07-0  PRIOR DATE: 100.008  PRIOR PRIOR DATE: 100.008  PRIOR PRIOR DATE: 100
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FILING DATE: July 28, 1999
APPLICATION NUMBER: PCT/US98/19330
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APPLICATION NUMBER: PCT/US98/25108
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Sequence 82, Application US/09944457
Patent No. US20020110859A1
GENERAL INFORMATION:
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                                                                                                                                                                                 Goddard, Audrey
Godowski, Paul
Grimaldi, Christopher
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                                                                                                                        Ferrara, Napoleone
Filvaroff, Ellen
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Hillan, Kenneth
Kljavin, Ivar
Napier, Mary
                                                              APPLICANT: Baker, Kevin
APPLICANT: Botstein, David
                                                                                                                                                             Gerritsen, Mary
                                                                                                                                                                                                                                                                                                                          Roy, Margaret
Tumas, Daniel
Wood, William
                                                                                                       Eaton, Dan
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                                                            ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArglle11e 120
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      166 TTGATGATCTTCGACACTCGAAAAACAGCTAGACAACCCCAACTGCTACCTATTTTCTGT
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APPLICATION NUMBER: 09/218,517 FILING DATE: December 22, 1998 APPLICATION NUMBER: 09/254,311 FILING DATE: March 3, 1999 PRIOR

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826 AAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCTGCT
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US-09-989-732-514

Sequence 514, Application US/09989732

Fatent No. US20020123463A1

APPLICANT: Baker, Kevin P.

APPLICANT: Beaker, Kevin P.

APPLICANT: Bester, Loud

APPLICANT: Eaton, Dan L.

APPLICANT: Ferrara, Napoleone

APPLICANT: Ferrara, Napoleone

APPLICANT: Gerber, Hanspeter
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PRIOR APPLICATION NUMBER: PCT/US99/12252
PRIOR FILING DATE: June 22, 1999
PRIOR APPLICATION NUMBER: PCT/US99/2009
PRIOR APPLICATION NUMBER: PCT/US99/28409
PRIOR APPLICATION NUMBER: PCT/US99/28419
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR PILING DATE: No. US20020110859Alember 30, 1999
PRIOR PILING DATE: No. US20020110859Alember 30, 1999
PRIOR FILING DATE: No. US20020110859Alember 30, 1999
PRIOR FILING DATE: PCT/US99/30095
PRIOR PILING DATE: December 16, 1999
PRIOR APPLICATION NUMBER: PCT/US90/03565
PRIOR APPLICATION NUMBER: PCT/US00/03665
PRIOR FILING DATE: Pebruary 22, 2000
PRIOR FILING DATE: Pebruary 22, 2000
PRIOR PILING DATE: March 30, 2000
PRIOR APPLICATION NUMBER: PCT/US00/08439
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR PILING DATE: March 30, 2000
PRIOR FILING DATE: March 30, 2000
PRIOR PILING DATE: PEDRUARY 28, 2001
PRIOR FILING DATE: PEDRUARY 28, 2001
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R FILING DATE: 1998-06-10

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R FILING DATE: 1998-06-10

R APPLICATION NUMBER: 60/08824

R FILING DATE: 1998-06-10

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R APPLICATION NUMBER: 60/08858
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FILING DATE: 1998-06-12
APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
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APPLICATION NUMBER: 60/089512
APPLICATION UNMBER: 60/089514
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FILING DATE: 1998-06-23
APPLICATION NUMBER: 60/090355
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APPLICATION NUMBER: 60/090429
FILING DATE: 1998-06-24
APPLICATION NUMBER: 60/090431
FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/090445
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APPLICATION NUMBER: 60/088738
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APPLICATION NUMBER: 60/088876
FILING DATE: 1998-06-11
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APPLICATION NUMBER: 60/089532
FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/089600
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FILING DATE: 1998-06-18
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FILING DATE: 1998-06-18
APPLICATION NUMBER: 60/089947
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FILING DATE: 1998-06-19
APPLICATION NUMBER: 60/089952
FILING DATE: 1998-06-19
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APPLICATION NUMBER: 60/090252
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APPLICATION NUMBER: 60/090254
FILING DATE: 1998-06-22
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APPLICATION NUMBER: 60/090472
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LICATION NUMBER: 60/089598
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APPLICATION NUMBER: 60/089599
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ING DATE: 1998-06-17
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730PLC57
CURRENT APPLICATION NUMBER: US/09/989,732
CURRENT PILING DATE: 1097-06-16
PRIOR PILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR PILING DATE: 1997-10-17
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APPLICATION NUMBER: 60/088025
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APPLICATION NUMBER: 60/088026
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FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088217
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IG DATE: 1998-06-02
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APPLICATION NUMBER: 60/088326
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APPLICATION NUMBER: 60/088167
                               Grimaldi,J.Christopher
Gurney, Austin L.
Kljavin,Ivar J.
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APPLICATION NUMBER: 60/088021
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Williams, P. Mickey
Wood, William I.
                                                                                                                                                           Roy, Margaret Ann
Stewart, Timothy A
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                                                                                               Napier, Mary A.
Pan, James
Paoni, Nicholas F.
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Stewart, 11...
Daniel
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                                                                                                                                                                                                                                                                                                                                                      766 CACCTGGAGAAACTATTTAAGATGGATGAAGCAAGTGCCCAGCTCCTTGCTTATAAGGAA
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                             ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArg1leIle
                                                                                                      ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer
                                                                                                                              HisLeuGluLysLeuPheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu
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                                                               526 CCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT
                                                                                                                                                                                LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr
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US-08-991-073-514
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; Patent No. US20020127576A1
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Matches:
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PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: 60/090535
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PRIOR PAPLICATION NUMBER: 60/090676
PRIOR PAPLICATION NUMBER: 60/090676
PRIOR PILING DATE: 1998-06-25
PRIOR PILING DATE: 1998-06-26
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PRIOR PILING DATE: 1998-06-26
PRIOR PILING DATE: 1998-07-01
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RF FILING DATE: 1998-06-17
R APPLICATION NUMBER: 60/089601
R FILING DATE: 1998-06-18
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R APPLICATION NUMBER: 60/089908
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R APPLICATION VUMBER: 60/089947

R FILING DATE: 1998-06-19

R APPLICATION NUMBER: 60/089948

FILING DATE: 1998-06-19

R APPLICATION NUMBER: 60/089952

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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088876
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APPLICATION NUMBER: 60/089105
FILING DATE: 1998-06-12
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FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089599
FILING DATE: 1998-06-17
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APPLICATION NUMBER: 60/090355
FILING DATE: 1998-06-23
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FILING DATE: 1998-06-10
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FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088826
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FILING DATE: 1998-06-10
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APPLICATION NUMBER: 60/088861
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FILING DATE: 1998-06-16
APPLICATION NUMBER: 60/089512
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APPLICATION NUMBER: 60/089538
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FILING DATE: 1998-06-24
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APPLICATION NUMBER: 60/088734
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APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730PIC15
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CURRENT FILING DATE: 2001-11-14
PRIOR PILING DATE: 2001-11-14
PRIOR PRILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-06-16
PRIOR FILING DATE: 1997-10-17
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PRIOR PLICATION NUMBER: 60/065186
PRIOR PELING DATE: 1997-11-12
PRIOR PELING DATE: 1997-11-13
PRIOR PELING DATE: 1997-11-14
PRIOR FILING DATE: 1997-11-124
PRIOR PELING DATE: 1997-11-24
PRIOR PELING DATE: 1997-11-24
PRIOR PELING DATE: 1998-02-25
PRIOR PELING DATE: 1998-02-25
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FILLING DATE: 1998-06-04
APPLICATION NUMBER: 60/089033
APPLICATION NUMBER: 60/089326
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Gurney, Austin L.
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Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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Williams, P. Mickey
Wood, William I.
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Gerritsen, Mary E
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Napier,Mary A.
                                     Baker, Kevin P.
Botstein, David
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                                                                                                                                                                                                                                                                                             Godowski, Paul
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                                                                                                                          Eaton, Dan L.
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                                   1486 GATTATTTGATCAATGGGATCTATGTGGACATC 1518
421 AspTyrLeulleAsnGlylleTyrValAspIle
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FILING DATE: July 28, 1999
APPLICATION NUMBER: PCT/US98/19330
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APPLICATION NUMBER: PCT/US98/25108
FILING DATE: December 1, 1998
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CURRENT APPLICATION NUMBER: U5/09/945,5
CURRENT APPLICATION NUMBER: U5/09/946
CURRENT PILING DATE: 2001-05-26
PRIOR FILING DATE: December 11, 1997
PRIOR FILING DATE: December 11, 1997
PRIOR APPLICATION NUMBER: 60/669,334
PRIOR FILING DATE: December 11, 1997
PRIOR APPLICATION NUMBER: 60/669,335
PRIOR APPLICATION NUMBER: 60/669,425
PRIOR FILING DATE: December 11, 1997
PRIOR PRIOR APPLICATION NUMBER: 60/669,694
PRIOR FILING DATE: December 16, 1997
PRIOR APPLICATION NUMBER: 60/669,694
PRIOR FILING DATE: December 16, 1997
PRIOR PRILING DATE: December 16, 1997
PRIOR PRILING DATE: December 16, 1997
PRIOR APPLICATION NUMBER: 60/669,694
PRIOR FILING DATE: December 16, 1997
PRIOR APPLICATION NUMBER: 60/069,917
PRIOR APPLICATION NUMBER: 60/069,917
PRIOR PRILING DATE: December 18, 1997
PRIOR PRILING DATE: Pebruary 9, 1998
PRIOR APPLICATION NUMBER: 60/074,086
PRIOR APPLICATION NUMBER: 60/074,086
PRIOR APPLICATION NUMBER: 60/074,086
PRIOR FILING DATE: Pebruary 9, 1998
PRIOR PILING DATE: Pebruary 9, 1998
PRIOR FILING DATE: PEBRUARE, 60/1146, 222
PRIOR FILING DATE: PEBRUARE, 60/1146, 223
                                                                                                                                                                                Sequence 82, Application US/09945587
Patent No. US20020127643A1
GENERAL INFORMATION:
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Filvaroff, Ellen
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APPLICANT: Botstein, David
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Tumas, Daniel
Wood, William
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LeuMetIlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys 100
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OR APPLICATION NUMBER: PCT/US99/21090
OR FILING DATE: September 15, 1999
OR FILING DATE: September 15, 1999
OR PILING DATE: No. US20020127643A1ember 30, 1999
OR FILING DATE: No. US20020127643A1ember 30, 1999
OR FILING DATE: No. US20020127643A1ember 30, 1999
OR FILING DATE: December1, 1999
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Matches:
Conservative:
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                                                                                                                                                                                                                                             FILING DATE: December 22, 1998
APPLICATION NUMBER: 09/254,311
FILING DATE: MARCH 3, 1999
APPLICATION NUMBER: PCT/US99/12252
LING DATE: December 16, 1998
PLICATION NUMBER: 09/218,517
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Best Local Similarity:
Query Match:
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Pred. No.:
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ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgIleIle 120

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Gurney, Austin L.
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Williams, P. Mickey
Wood, William I.
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Stewart, Timothy A
Tumas, Daniel
                                                Ferrara, Napoleone
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                                                                                              Gerritsen, Mary E
                                                                               Gerber, Hanspeter
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Napier, Mary A.
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                 Desnoyers, Luc
Eaton, Dan L.
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                                                                                       LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr 160
                                                                                                            HisLeuGluLysLeuDheLysMetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 200
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CCCAACGAGGAAGCCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT 585
                                                                                                                                                        SerLysProThrAspIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAsp 180
                                                                                                                                                                                                                                                                                  LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro 220
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                                                706 TCAAAGCCCACCGATATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGAT
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                              ThraspPheProSerLeuThrargasnLeuProSerGlnGluLeuProGlnGluAspSer
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Sequence 514, Application US/09990442
Patent No. US20020132252A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.

NUMBER: 60/088202 1998-06-05 1998-06-05 1998-06-05 1998-06-05 NUMBER: 60/088217 1998-06-05 NUMBER: 60/08855 11988-06-10 NUMBER: 60/088734 1998-06-10 NUMBER: 60/088738	1998-06-10 NUMBER: 60/088824 1998-06-10 NUMBER: 60/088826 1998-06-10 NUMBER: 60/088861 1998-06-11 NUMBER: 60/088861 1998-06-11 NUMBER: 60/089105 1998-06-12 NUMBER: 60/089140 1998-06-12 NUMBER: 60/089140 1998-06-12 NUMBER: 60/089518 1998-06-16 1998-06-16 1998-06-16 NUMBER: 60/089518 1998-06-16 NUMBER: 60/089518 1998-06-17 NUMBER: 60/089598 1998-06-17 NUMBER: 60/089599 1998-06-17 NUMBER: 60/089599 1998-06-17 NUMBER: 60/089599 1998-06-17 NUMBER: 60/089599 1998-06-17 NUMBER: 60/089591 NUMBER: 60/089591 NUMBER: 60/089591 NUMBER: 60/089591 NUMBER: 60/089591 NUMBER: 60/089691	6-18 60/08990 60/08994 60/08994 60/08994 60/08995 60/08995 60/08025 60/08025 60/08025 60/08025 60/08035 60/08043
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FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/090444 FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/090445 FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/090472 FILING DATE: 1998-06-24 APPLICATION NUMBER: 60/09035 FILING DATE: 1908-06-24	APPLICATION NUMBER: 60/0905  FILING DATE: 1998-06-24  APPLICATION NUMBER: 60/0905  FILING DATE: 1998-06-24  APPLICATION NUMBER: 60/0905  FILING DATE: 1998-06-26  APPLICATION NUMBER: 60/0906  FILING DATE: 1998-06-25  APPLICATION NUMBER: 60/0906  FILING DATE: 1998-06-26  APPLICATION NUMBER: 60/0908  FILING DATE: 1998-06-26	APPLICATION NUMBER: 60/09 APPLICATION NUMBER: 60/09 APPLICATION NUMBER: 60/09 APPLICATION NUMBER: 60/09 FILING DATE: 1998-07-01 APPLICATION NUMBER: 60/09 FILING DATE: 1998-07-02 APPLICATION NUMBER: 60/09 FILING DATE: 1998-07-02 APPLICATION NUMBER: 60/09 FILING DATE: 1998-07-02 APPLICATION NUMBER: 60/09 FILING DATE: 1998-07-07
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## US-10-735-014-83 (1-431) x US-09-990-442-514 (1-2284)

SLeuThr 20	CTGACA 285	Illeasp 40	SATIGAC 345	ThrGln 60	ACTCAA 405	CysAsn 80
1 MetPhePheGlyGlyGluGlySerLeuThrTyrThrLeuValllelleCysPheLeuThr 20	226 ATGITTTTGGGGGGGGGGGGGGGGGGTTGACTTTGGTAATAATTTGCTTCCTGACA 285	21 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp 40	286 CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAGAGTCTAGAAGATGTTGTCATTGAC 345	41 IleGlnSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGln 60	ALCCAGTCATCTCTTCTAAGGGAATCAGAGCAATGAGCCCGTATATACTTCAACTCAA 405	61 GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn 80
MetPhePheGlyGlyGluGl	ATGTTCTTCGGGGGAGAAGG	LeuArgLeuSerAlaSerGl	CTAAGGCTGTCTGCTAGTCA	IleGlnSerSerLeuSerLy	ATCCAGTCATCTCTTTCTAA	GluAspCysIleAsnSerCy
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APPLICANT: Tunas, bantel
APPLICANT: Tunas, bantel
APPLICANT: Wetanabe, Colin K.
APPLICANT: Wickey
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APPLICANT: Wood, Williams P. Wickey
APPLICANT: Wood, Williams P. Wickey
APPLICANT: Abang, Zemin
TITLE OF INVEWITON: Acids Encoding the Same
TITLE OF INVEWITON WINDER: 60/06250
PRIOR PRIOR PRILING DATE: 1997-10-17
PRIOR PELING DATE: 1997-10-17
PRIOR PELING DATE: 1996-03-20
PRIOR PELING DATE: 1998-03-20
PRIOR PELING DATE: 1998-05-20
PRIOR PELING DATE: 1998-05-20
PRIOR PELING DATE: 1998-05-20
PRIOR PELING DATE: 1998-05-20
PRIOR PELING DATE: 1998-06-07
     1486 GATTATTTGATCAATGGGATCTATGTGGACATC 1518
                                        RESULT 13
US-09-991-163-514
; Sequence 514, Application US/09991163
; Patent No. US20020132253A1
; GENERAL INFORMATION:
; APPLICANT: ABAKenazi, Avi J.
; APPLICANT: Baker, Kevin P.
· APPLICANT: Pottein, David
                                                                                                                                                                                                                                                                                                                                                                                                                    Godowski, Paul J.
Grimaldi, J. Christopher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stewart, Timothy A.
Tumas, Daniel
Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
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Eaton, Dan L.
Ferrara, Napoleone
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Paoni, Nicholas F.
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Gerber, Hanspeter
Gerritsen, Mary E
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GAAGACTGCATTAATTCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGCATGTAAC
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946 ACTCCAAAGCCGCCACCCTTCTACCCACCAATGCTTCAGTGACACCTTCTGGGACTTCC 1005
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PRIOR APPLICATION NUMBER: 60/146,222
PRIOR FILING DATE: July 28, 1999
PRIOR FILING DATE: July 28, 1999
PRIOR FILING DATE: September 16, 1998
PRIOR FILING DATE: September 16, 1998
PRIOR FILING DATE: December 16, 1998
PRIOR PLING DATE: December 16, 1998
PRIOR FILING DATE: December 12, 1999
PRIOR FILING DATE: March 3, 1999
PRIOR PRILING DATE: NO. US200201327684ember 30, 1999
PRIOR PRILING DATE: PEPTUARY 11, 2000
PRIOR PRILING DATE: PEPTUARY 22, 2000
PRIOR PRILING DATE: PEPTUARY 22, 2000
PRIOR PRILING DATE: PEPTUARY 22, 2000
PRIOR PRILING DATE: MARCH 30, 2000
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CORGANISM: Homo Sapien
US-09-945-015-82
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Best Local Similarity:
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APPLICANT: WOOD, MISTER
APPLICANT: WOOD, MISTER
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
GURRENT APPLICANTON NUMBER: 0/6,028
FILE REPERBRUCE: 12,197
FILE OF PRICAPICATION NUMBER: 0/6,028
FILE RICHARD APPLICATION NUMBER: 0/6,0335
FILE RICHARD AND TRANSMERS: 0/6,0335
FILE RIC
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Sequence 82, Application US/09944396
Patent No. US20020132981A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                          Godowski, Paul
Grimaldi, Christopher
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Filvaroff, Ellen
Gerritsen, Mary
Goddard, Audrey
                                                                                      APPLICANT: Baker, Kevin
APPLICANT: Botstein, David
APPLICANT: Eaton, Dan
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Hillan, Kenneth
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PRIOR APPLICATION NUMBER: PCT/US99/12252
PRIOR FILING DATE: June 22, 1999
PRIOR FILING DATE: June 22, 1999
PRIOR PELING LATE: September 15, 1999
PRIOR PILING DATE: September 15, 1999
PRIOR FILING DATE: No. US20020132981Alember 30, 1999
PRIOR PELING DATE: No. US20020132991Alember 30, 1999
PRIOR PELING DATE: December 16, 1999
PRIOR PILING DATE: December 16, 1999
PRIOR PELING DATE: December 16, 1999
PRIOR PELING DATE: PEPURATY 11, 2000
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR PELING DATE: PEPURATY 22, 2000
PRIOR PELING DATE: PEPURATY 22, 2000
PRIOR APPLICATION NUMBER: PCT/US00/04419
PRIOR APPLICATION NUMBER: PCT/US00/14042
PRIOR PELING DATE: March 30, 2000
PRIOR PELING DATE: PELINGSO/08439
PRIOR PELING DATE: PELINGSO/08439
PRIOR PELING DATE: PEDICATION NUMBER: PCT/US00/20710
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CORGANISM: Homo Sapien
US-09-944-396-82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
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	1 1 1 1 2 2 2 2 8 2 4 4 4 9 0 0 1 1 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3	1 LeuleuhisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr 160 	- 9	81 HisLeuGluLysLeuPheLysWetAspGluAlaSerAlaGlnLeuLeuAlaTyrLysGlu 200 	01 LysGlyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro 220 	21 GlubsnvalSeralaLeuProalaThrValAlaValAlaSerProHisThrThrSerala 240 	ч 9		<b>'</b>	н 9	7 9	1 Leu	ч 9	1 PheGluLysTrpLeuLeulleG 	н 9	
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Search completed: April 27, 2005, 02:27:57 Job time : 667 secs

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GSS 12-DEC-2003
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BI031052 IL5-MT026
AW75292 QVO-CT022
CO879641 BOVGEN 07
BM820174 K-EST008
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BM820174 K-EST0088
BM846209 K-EST0125
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H50932 yo35f03.rl
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AGENCOURT
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CK834065 4058249 B
BP246319 BP246319
AU123305 AU123305
BU789700 1044h09.x
CK971151 4087056 B
BX953184 DKFZD7651N
                                                      1439 Full
AGENCOURT
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EST11796
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AGENCOURT
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170005999
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Perriera, S., Wanong, G., Zheng, X.H., White, T.J., Shinsky, J.J., Adams, M.D. and Cargill, New Indexing nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                 4058249 B
                                                                                                                             602139129
                                                                                                                                                                                                                                                          602692553
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BQ325584 MR4-CI018
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                                                                                                                                                                                                                                     AL549886
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Direct Submission
Submitted (16-VNOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.

Location/Qualifiers
1.1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY401136 12-0EC-2
Homo sapiens HCM0790 gene, VIRTUAL TRANSCRIPT, partial sequence,
                                                                                                                                                                                                                  CF593691 AL549886 ABC720669 6BF312571 CN365249 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
AK046837
AK018650
AK018650
CCV024215
CCV024215
AK0269273
BBF681769
BBF71626
CCF593691
CCF5931
CCF5
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BG720926
CK974547
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Homo sapiens
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                                                                                                         gene trios
 AY401136
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AY401136
LOCUS
DEFINITION
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KEYWORDS
SOURCE
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JOURNAL
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   Command line parameters:
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-USER=US10735014_@CGN_1 1_5180_@runat_26042005_113101_7425 -NCPU=6 -ICPU=3
-NO_WMAP -LARREQUERY -NEG_SCORES=0 -WAIT -DSPBLOK=100 -LONGIGG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPOP=6
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CR621081 full-leng
BQ424639 AGENCOURT
BX350141 BX350141
AL525434 AL525434
AK01138 Mus muscu
AK033526 Mus muscu
AK018635 Mus muscu
                                                                                                                  April 26, 2005, 22:01:01; Search time 3342 Seconds (without alignments) 4908.947 Million cell updates/sec
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                                                                                                                                                                                                              2211
1 MFFGGEGSLTYTLVIICFLT......LRRKRYSRLDYLINGIYVDI 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                      - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                34239544 segs, 19032134700 residues
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Maximum Match 100%
Listing first 45 summaries
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BX350141
AL525434
AY401138
AK033526
AK018635
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CR621081
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Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Maximum DB seq length: 2000000000
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9b_htc::*
9b_est2::*
9b_est4::*
9b_est4::*
9b_est6::*
9b_gss1::*
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1296
1965
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884
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Match
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823.2
61.2
61.2
53.2
52.7
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1296 bp DNA linear GSS 12-DEC-2003 Pan troglodytes HCM0790 gene, VIRTUAL TRANSCRIPT, partial sequence, AX401137
                                                                                                                                                                                                                                                                                                       961 CCGTTTACAGAAATCTCCCAACCTAACTTTGAACACAGGGAATGTGTATAACCCTACTGCA 1020
                                                                                                                                                                                                 1021 CTTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCCTGGGAAGGTAGG 1080
                                                                                                                                                                                                                                                               321 PropheThrGluIleSerAgnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340
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Pan troglodytes (chimpanzee)
Pan troglodytes (chimpanzee)
Pan troglodytes (chimpanzee)
Pan troglodytes (bordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
I (bases I to 1296)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A.,
Ford, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B.,
Perriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
Adams, M. D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Let.196)

2 (bases 1 to 1296)

3 (lark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.

Direct Submission

L. Submitted (16-V0702) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA

This sequence was made by sequencing genomic exons and ordering them based on alignment.

Location/Qualifiers
 LeuSerMetSerAsnValGluSerSerThrMetAsnLysThrAlaSerTrpGluGlyArg
                                                                                                                                                                                                                                      361 GluAlaSerProGlySerSerGlnGlySerValProGluAsnGlnTyrGlyLeuPro
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/db_xref="taxon:9598"
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Science 302 (5652), 1960-1963 (2003)
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/locus_tag="HCM0790"
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   281
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AUTHORS
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JOURNAL
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AY401137
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KEYWORDS
SOURCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGATCAAGAAATAGCTCATCTGCTGCCT 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluAsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla 240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCTTACAIGGCCAATTTTCACAAGCAGTCACTCCCCTAGCCCATCATCACACAGATTAT 480
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                                                                                                                                                                                                                                                                                                                                                                                               121 ATCCAGTCATCTCTTTCTAAGGAATCAAGGCAATGAGCCCGTATATACTTCAACTCAA
                                                                                                                                                                                                                                                      Met.Phe.Phe.GlyGlyGlyGlyGerLeuThrTyrThrLeuValileIleCysPheLeuThr
                                                                                                                                                                                                                                                                                       1 ATGTTCTTCGGGGGGGAGAGGGGGCCTTGACTTTGGTAATATTTGCTTCCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                            GluAspCys1eAsnSerCysCysSerThrLysAsn1leSerGlyAspLysAlaCysAsn
                                                                                                                    1296
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0
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Matches:
Conservative:
Mismatches:
Indels:
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<1. .>1296
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                                                                                                                   2.74e-191
2211.00
100.00%
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Best Local Similarity:
Query Match:
DB:
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Qy         321 ProPheThrGluIleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340           Db	Oy 381 PheGluLysTrpLeuLeu1leGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400		SAYHO7 of Plac	Mammalia, Eutheria, Primates, I bases 1 to 1965) Li, W.B., Gruber, C., Jessee, J., Full-length CDNA libraries and Unpublished Contact: Feng Liang Email: fhttp://tulllangth.invitrogen.cr	REFERENCE 2 (Dases 1 to 1965)  AUTHORS Genoscope.  TITLE Direct Submission JOURNAL Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)  COMMENT 1st strand cDNA was primed with a Not1-oligo(dT) primer. Five prime end enrichted, double-strand cDNA was digested with Not I and along a stresp of the poWYSPORT 6 vector. Library	was normalized. Library was constructed by Life Technologies, a division of Invitrogen.  FEATURES Location/Qualifiers 1. 1965 / organism="Homo sapiens" / mol type="mRNA" / db xref="texton:9606" / clone="CS001054YH00" / tissue_type="Placenta Cot 25-normalized"	Alignment Scores: 3.05e-156 Length: 1965  Pred. No.: 3.05e-156 Length: 357  Scoret Similarity: 100.00% Conservative: 0  Best Local Similarity: 100.00% Mismatches: 0  Query Match: 82.81% Indels: 0  DB: 3 Gaps: 0  US-10-735-014-83 (1-431) x CR621081 (1-1965)
ed. No.:  2183.00 Matches: A26  Tocent Similarity: 98.84* Mismatches: 5 ery Match: 98.73* Indels: Gaps: 0 -10-735-014-83 (1-431) x AY401137 (1-1296)    MetphephedlyGlyGluGlySerLeuThrTyThrLeuVallIeIleCysPheLeuThr	1 ATGTTCTTTGGGGGGAGAGGCTTGACTTTGGTAATAATTTGCTTCCTGACA 21 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp	DD	Db         241 TTGATGATGATCTCGAAAAACAGCTAGACAACTGCTACCTCTTTTCTGT 300           Qy         101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArg11e11e 120           CQ         101 ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArg11e11e 120           Db         301 CCCAATGAGAACCTGTCCATTGAAACCAGCAAAAGGACTTATGAGTTACAGGATAATT 360           CQ         121 ThrAspPheProSerLeuThrArgAsnLeuProSerGlnGluLeuProGlnGluAspSer 140	361 ACACATTTCCATCTTGACCAGAATTTGCCAAGAGTTACCCCAGGAAGTTCT 141 LeuleuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThraspTyr	DD	221 GlubsnValSerAlaLeuProAlaThrValAlaValAlaSerProHisThrThrSerAla	Qy         261 GlnProGlnLeuAlaThrThrAlaProProValThrThrValThrSercinProProThr 280           Db         781 CAGCCACACCACCACCACCACTGACACCTGTCACCTCTCAGCCTCCCCCCGG 840           Qy         281 ThrLeu1leSerThrValPheThrArgAlaAlaThrLeuGlnalaMetAlaThrThr 300           Db         841 ACCCTCATTCTACACGGGTTTTTACACGGGTGCGCTACACTCCAACGCAATACACTACACACAC

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/clone lib="NIH MGC 72"
/clone lib="NIH MGC 72"
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                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases I to 853)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Londatished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov/
Tissue Procurement: ATCC/DCTD/DTP

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies (ILNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Linn at:

http://image.lln.gov

location/Qualifiers

Location/Qualifiers
AGENCOURT 7896936 NIH_MGC_72 homo sapiens cDNA clone IMAGE:6159709
5', mRNA sequence.
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112 136 132 196 152 256 172 316

92

primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."	Alignment Scores: 4.53e-113 Length: 884  Pred. No.: 1353.00 Matches: 283  Score: Similarity: 97.26% Conservative: 1  Best Local Similarity: 96.92% Mismatches: 8  Query Match: 5  DB: 5  US-10-735-014-83 (1-431) x BX350141 (1-884)	Oy 125 SerLeuThrArghanLeuProSerGlnGluLeuProGlnGluAspSerLeuLeuHisGly 144	165 ASDIleSerTrpArgAspThrLeuSerGlnLysPheGlySerSerAspHisLeuGluLys :::	Oy 205 GlnSerSerGlnPheSerSerAspGlnGlulleAlaHisLeuLeuProGluAsnValSer 224	0y 225 AlaLeubrohlathavalAlaSerProHisthrThrSerAlaThrPoLyspro 249  246 AlaThrTheLeubroThrAsnalaSerValThrPoSerGlyThrSerGlnFocGlnLeu 264  247 AlaThrTheLeubroThrAsnalaSerValThrProSerGlyThrSerGlnProGlnLeu 264  248 AlaThrTheLeubroThrAsnalaSerValThrProSerGlyThrSerGlnProGlnLeu 264  249 SanthrLeubeubroThrAsnalaSerValThrSerGlnProBrochadcrG 466  240 SanthrThalaProProValThrThrValThrSerGlnProProThrThrLeullsSer 284  241 AlaThrThrAsnalaProProValThrThrValThrSerGlnProProThrThrLeullsSer 284  242 SanthrThrAsnalaProProThrAsnalaBerThrGlnProThrLeuThr 304  243 ThrValPheThrArgalaAlaAlaThrThrValThrSerGlnProThrThrLeull 1314  244 SacAcGTTTTTTACACGGGTGCGGTGCACTCCAGCAATGGTACACACAC	
Db 317 TCTCAGAAGTTTGGATCCTCAGATCACCTGGAGAAACTATTAAGATGGATG	377 GCCCAGCTCCTTGCTTATAAGGAAAAAGGCCATTCTCAGAGTTCACAATTTTCCTCTGAT 43 213 GInGlulleAlaHisLeuLeuProGluAsnValSerAlaLeuProAlaThrValAlaVal 23 213 GInGlulleAlaHisLeuLeuProGluAsnValSerAlaLeuProAlaThrValAlaVal 23 213 GInGlulleAlaHisLeuLeuProGTGCCTGCCTGCCAGCTACGGTGGCAGTT 49 233 AlaSerProHisThrThrSerAlaThrProLysProAlaThrLeuLeuProThrAsnAla 25 211 GITHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIH	Oy 253 SerValThrProSerGlyThrSerGlnProGlnLeuAlaThrThrAlaBroProValThr 272	ThrLeuGlnAlaMetAlaThrThrAlaValLeuThrThrThrPheGlnAlaProThrAgp	Qy 333 -GlyAsnValTyrAsn-ProThrAlaLeuSerNetSerAsnVal 346 	B84 bp mRNA linear EST ( PRIME, mRNA sequence.  418  Chordata; Craniata; Vertebrata; Butel Primates; Catarrhini; Hominidae; Hom Jessee, J. and Polayes, D.  raries and normalization  ational de Sequencage  x, CP 5706 - 91057 EVRY cedex - FRANC Ope. Crns. fr, Web: www.genoscope.cns. fr primed with a NotI-oligo(dT) primer:  primed with a NotI-oligo(dT) primer:  primed with a NotI-oligo (dT) primer:  primed with a Sequence belongs to sequence about this cluster, see  about this cluster, see  cns. fr/cdna?s=CSOBAIO23ZA03_CSO2129_ alifiers  Homo sapiens"  mRNA"  Homo sapiens Homo sapiens PLOREATA COT 25-NORMALI	/note="left strand cDNA was primed with a NotI-oligo(dT)

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966 YWATGCMAARCCSGCAMCCTTYTACCCM---CAATGCTTAGTGAMACCTYYTGGACTYCM 1022
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Mus musculus HCM0790 gene, VIRTUAL TRANSCRIPT, partial sequence,
                                                         120
                                                                                                               607
                                                                                                                                                                                                                                                                                    LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHhrAspTyr 160
                                                                                                                                                                                                                                                                                                                            CTCTTACATGGCCAATTTTCACAAGCAGTCACCCCCTAGCCCCATCATCACACAGTTAT 727
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, B., Lu, F., Murphy, B., Ferriera, S., Wang, G., S., Mang, G., Adame, M.D. and Cargill, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inferring nonneutral evolution from human-chimp-mouse orthologous
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2 (bases 1 to 1245)
Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Terriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.
Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
Location/Qualifiers
                                                                                                                                                                        ThraspPheProSerLeuThrargasnLeuProSerGlnGluLeuProGlnGluAspSer
   TTGATGATCTTCGACACTCGAAAAACAGCTAGACCAACCCAACTGCTACCTATTTTTCTGT
                                                            ProAsnGluGluAlaCysProLeuLysProAlaLysGlyLeuMetSerTyrArgIleIle
                                                                                                               cccaacgaggaagccrgrrcarrgaaaccagcaaaaggacrrargagrracaggaraarr
                                                                                                                                                                                                            728 TCAAAGCCCACCGATATCTCATGGAGAGACACACTTTCTCAGAAGTTTGGATCCTCAGAT
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Mus musculus
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                                                                                                            AL525434 ALMO Sapiens NEUROBLASTOWA COT 25-NORMALIZED Homo Sapiens CDNA clone CSODC011YG07 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue type="NEUROBLASTOMA COT 25-NORMALIZED" /clone_lib="Homo sapiens NEUROBLASTOMA COT 25-NORMALIZED" /note="Ist strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and cloned strand cDNA was sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308 CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGAGTGTTGTCATTGAC 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCAGTCATCTCTTTCTAAGGGAATCAGAGGCAATGAGCCCGTATATTACTTCAACTCAA 427
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                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

( hases 1 to 1050)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization
Unpublished (2001)

On Feb 13, 2001 this sequence version replaced g1:31063298.
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/db_xref="taxon:9606"
/clone="CS0DC011YG07"
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AL525434.3 GI:45700628
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Akusises6 2235 bp mRNA linear HTC 03-APR-2004 Mus musculus adult male colon cDNA, RIKEN full-length enriched library, clone:9030601P12 product:weakly similar to NT2RM1001115 PROTBIN [Homo sapiens], full insert sequence.

AK033526 I GI:26329204 HTC; CAP trapper.

Mus musculus (house mouse)
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                                                       ProPheThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340
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     -- CCCGTGGTTACACATCAG
                                  AlavalieuThrThrPheGlnAlaProThrAspSerLysGlySerLeuGluThrIle
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High-efficiency full-length CDNA .
Meth. Enzymol. 303, 19-44 (1999)
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Mammalia; Eutheria; Rodentia;
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	Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)	Score: Percent	Similarity:
AUTHORS	The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.		311111111111 :
	Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs	US-10-7	-735-014-83 (1-431) x AK033
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AUTHORS	S Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanaqaki, T., Hara, A., Hashizume, W.,	₹ da	
-	Hayashida,K., Hayatsu,N., Hiramoto,K., Hiraoka,T., Hirozane,T., Hori,F., Imotani,K., Ishii,Y., Itoh,M., Kadawa,I., Kasukawa,T.,	8	
	Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M.,	i i	
	Nakamura, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N.,	<u> </u>	CCAMGGI
	Okazakı, Y., Salto, K., Salton, H., Sakaı, C., Sakalı, K., Sakazume, N., Sano, H., Sasakı, D., Shibata, K., Shinagawa, A., Shiraki, T.,	ζ,	
	Sogabe,Y., Tagami,M., Tagawa,A., Takahashi,F., Takaku-Akahira,S., Takeda,Y., Tanaka,T., Tomaru,A., Tova,T., Yasunishi,A.	qq	400 Arccarccrccrrrca
TITLE	Muramatsu, M. and Hayashizaki, Y. Direct Submission	λŏ	61 GluAspCysIleAsnSer
ΑΓ	Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of	qu	460 GAAGACTGTATCGGTGCC
		ò	81 LeuMetilePheAspThrA
	Kanagawa 230-0045, Japan (B-mail.genome-res@gec.riken.jp,	QD	520 TTGATGATCTTTGACACC
	OXI:11-Cp://genome.gsc.ilken.jp/, leliol-45-503-9222, 	λο	101 ProAsnGluGluAlaCysF
COMMENT	cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken	qa	see ccagcgaggargccrgrc
	Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to	À	121 ThrAspPheProSerLeuT
	prepare mouse tissues. Diame visit our web site for further details		:
	p://genome.gsc.riken.jr	<b>Q</b>	
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source	12235 /organism="Mis_miscriliss"	qu	700 CICTIACTIGACCATICGI
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CDS	/dev_stage="adult" 2831527	λο -	201 LysGlyHisSerGlnSerS
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Alignment scores: Pred. No.:	ores: 3.46e-95 Length: 2235	λ̈σ —	321 ProPheThrGluIleSerA

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JOURNAL Nature 420, 563-573 (2002)  REFERENCE 6 (bases 1 to 2265)  AUTHORS Adachi, J. Aizawa, K., Akahira, S., Akimura, T., Arai, A., Aono, H., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Furuno, M., Hanagaki, T., Hara, A., Hayateu, N., Hiramoto, K., Haraoka, T., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Izawa, M., Kasukawa, T., Kato, H., Kawai, J., Kojima, Y., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Okazaki, Y., Okido, T., Owa, C., Salto, H., Salto, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shibata, Y., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Tanaka, T., Tejima, Y., Toya, T., Yanamura, T., Yasunishi, R., Yoshida, K., Yoshino, M., Muramatsu, M. and Hayashizaki, Y., Yoshida, K., Yoshino, M., Muramatsu, M. and Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genome Center (GSC), Briken Vokohama Tratitute of Tarimishio, Arminishio, Armini		prepare m [5/ GAGAG] prepared [ and subse- through on Rot = 185 adapter on GAGAGAGAG with Bamth bulk exciil end: Bamth	/ note weakl ( SPTR ( SPTR ( SPTR ) / codo / prote / db / / tran SKGIR KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL KPTGL K KPTGL K K KPTGL K K K K K K K K K K K K K K K K K K K	Alignment Scores: 3.54e-95 Length: 2265 Pred. No.: 1164.50 Matches: 258 Score: 68.45% Conservative: 37
AUGUATE AUGUAT	COMMENT	FEATURES	) N	Alignmer Pred. Nc Score: Percent
	Oy 421 AspTyrLeuIleAsnGlyIleTyrValAspIle 431  Db 1492 GACTACTTGATCAACGGATCTATGTTGACATC 1524  RESULT 9  AKO18635  LOCUS  AKO18635  AKO18635  AKO18635  DEFINITION MUS musculus adult male cecum cDNA, RIKEN full-length enriched library, clone:9130017N16 product:weakly similar to NT2RN1001115	ACCESSION PROTEIN [Homo sapiens], full insert sequence.  VERSION AKO18635.1 GI:12858442  KEYWORDS AKO18635.1 GI:12858442  SOURCE Mus musculus (house mouse)  ORGANISM Mus musculus (house mouse)  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.  REFERENCE I AUTHORS Carninci, P. and Hayashizaki, Y.  TITLE High-efficiency full-length cDNA cloning JOURNAL Meth. Enzymol. 303, 19-44 (1999)  MEDLINE 99279253	Konno, H., Akryama, J., Nischi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Inde, M., Ishii, Y., Matsumoto, H., Sakaguchi, S., Ikashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Tazwa, M., Ohara, E., Watshiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Maramateu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. TITLE RIKEN integrated sequence analysis (RISA) system-384-format ocourant Res. 10 (11), 1757-1771 (2000)  REPERBURGE 20530913  PUBMED 11076861  REPERBURGE 4  FANTOM CONSORTIUM.  FANTOM CONSORTIUM.  FANTOM CONSORTIUM.  FANTOM Assumed Assumed Fall-length mouse CDNA collection	The FANTOM C Group Phase Analysis of of 60,770 fu

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/db_xref="taxon:10090"

/clone="B830022E21"

/tissue type="medulla oblongata"

/clone_lib="RIKEN full-length enriched mouse cDNA library"

/dev stage="10 days neonate"
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SKGIRKNBPPHLATQBDCTGACCSTKOTAGDRSKOLMATPTRWTDRQDRVCYLFFCPSE
SKGIRKNBPPHLATQBDCTGACCSTKOTAGDRSKOLMATPASPACPER
SKGIRKNBPAKGLYNTRLIRDFPLTSANSSLQOLTQGBFLLLDHSSPGATPGFRTPAGYP
KPTGLSWSDRSSLKSTAPLHLRKHIKADBTSMQLPBEKSHSQSLQLPSELKMAHLLDY
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PGSTSFTPVVTHQAALTNTPQAHTDSKGILETMPFQGGSTLTSDPRHGKSSTSESSIT
NKTASWEDRRVSVGSASLNKGPKSQHGLSFEKWLLIGTLLCGVLFLVIGLVLLGRMLV
                                                                                                                                                                                                                                  Direct Submission in Appaintent; 1.

Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Rangqawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome-gsc.riken.jp/, Tel:81-45-503-9222,
             Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramcto, K., Hiraoka, T., Hirozane, T., Hori, F., Imotani, K., Ishii, Y., Itoh, M., Kagawa, T., Kautoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nagawa, T., Miyazaki, A., Murata, M., Nakamura, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku, Akahira, S., Muramatsu, M. and Hayashizaki, Y., Toya, T., Yasunishi, A., Yasunishi, A.,
                                                                                                                                                                                                                                                                                                                                                                                         cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Rike Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="unnamed protein product; putative
weakly similar to NT2RM1001115 PROTEIN [Homo sapiens]
(SPTR|Q9NW60, evidence: FASTY, 58.3%ID, 96.7%length,
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258
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             preserve mouse tissues.
Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/
Location/Qualifiers
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/db_xref="GI:26338442"
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                                                                                                                                                                                                                                                            IleGlnSerSerLeuSerLysGlyIleArgGlyAsnGluProValTyrThrSerThrGln 60
                                                                                                                                                                CCAAGGTCGTCTGCTGGTCAGAACTGCCTCACCAAGAGTCTAGAAGACGTTGTCATTGACAT
GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn
                                                                                                                  LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuMet IlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGATGATCTTTGACACCCGGAAGACAGACAGACAGCCCAACTGCTACCTGTTTTTCTGT
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/LTAILITE 101="MILERGYELAYSILIVISFITPRSSAGQNCLTKSLEDVVIDIQSSI
SAGTRGNEDPHILATOBDCIGACCSTRDIAGDKACNIMIFDTRRTTDROPNCYLFFCPSE
DACPIKARGYLYTRLIRDFPLTSANSSLQQLTQGFFILLDHSSPGATPGFRTPAGYP
KPTGLSWSDRSSLKSTAPEHHRKHIKADETSWQLPERKSHSQSLQLPSELKWAHLLPK
TVPTPFTTVAVAPLRNVSATLKPELLLTSISVTAKTLKQKEATTASFVTTVTSKLPGV
BGSTSFTPVAVTHQAALTNYFQAHTDSKGILETMPFQGGSTLTSDPRHGKSSTSESSIT
NKTASWEDRRYSVGASLNKGPKSQHGLSFEKWLLIGTLLCGVLFLVIGLVLGRMLV
EALRRKRYSRLDYLINGIYVDI"
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Submitted (10-JUL-2000) Yoshihide Hayashizaki, The Institute of Exploration Research Group, RIKEN) Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome-gsc.riken.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                           Please visit our web site (http://genome.gsc.riken.jp/) for further
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="unnamed protein product; putative weakly similar to NT2RM1001115 PROTEIN [Homo sapiens] (SPTR|Q9NW60, evidence: FASTY, 58.3%ID, 96.7%length,
     Sano, H., Sasaki, D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2286
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Matches:
Conservative:
Mismatches:
Indels:
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/db_xref="taxon:10090"
/clone="9130403P13"
     Saito, R., Sakai, C., Sakai, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
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/db_xref="GI:12858478"
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Location/Qualifiers
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1289 AGGGTCAGTGTAGGCAGCGCATCGCTGAACAAGGGTCCAAAAAGCCAGCATGGCCTTTCA 1348
                                                                                                    TTTGAGAAGTGGCTTCTCATTGGGACCCTCCTTTGTGGTGTTTTTGTTTTCTGGTAATAGGT 1408
                                                                                                                                                                                1409 CTCGTCCTCTTGGGTAGGATGCTGGTTGAAGCCCTCCGTAGGAAACGGTATTCAAGACTT 1468
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                                                    PheGluLysTrpLeuLeulleGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400
                                                                                                                                                   LeuValLeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu 420
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Analysis of the mouse transcriptome based on functional annotation of 60,770 kull-length cDNAs
Nature 420, 563-573 (2002)

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Mämmalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
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Nature 409, 685-690 (2001)
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381 PheGlub 1373 TTTGAGA 401 LeuVall. 1433. CTGTCC 421 ASPTYLL 1493 GACTACT	AK033557 Mus muscu library, PROTEIN [	HTC; CAP Mus muscu Mus muscu Eukaryota Mammalia; 1	Meth. Enz 99279253 10349636 2 Carninci, Itoh,M., Normaliza	Genome Re 20499374 11042159 3 Shibata, K Konno, H., Sumi, N.,	Fujiwake, Yoneda,Y. Yoneda,Y. Okazaki,Y RIKEN int, REGENCIN Genome Re 20530913	The RIKEN The RIKEN FUNCTIONA Nature 40: 5 The FANTOI Group Phai	Analysis Analysis Nature 42 6 (bases Adachi, J. Fukuda, S. Hayashida Hayashida, Katoh, H., Koya, S., Nawamura, Okakamura, Y
99 99 13 13 99 99 99 99 99 99 99 99 99 99 99 99 99	RESULT 12 AK033557 LOCUS DEFINITION ACCESSION	REFERENCE AUTHORS TITLE	JOURNAL MEDLINE PUBMED REFERENCE AUTHORS TITLE	JOURNAL MEDLINE PUBMED REFERENCE AUTHORS	TITLE JOURNAL MEDLINE PUBMED	REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS	TITLE JOURNAL REFERENCE AUTHORS
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21 LeuArgLeuSerAlaSerGlnAsnCysLeuLysLysSerLeuGluAspValValIleAsp 40		ThraspheproSerLeuThrArgasnLeuProSerGlnGluLeuProGlnGluAspSer AgaGaTTTTCGCTGACCGTAATTCATCACTCCAACAGTTAACACAAGGAGATTT LeuLeuHisGlyGlnPheSerGlnAlaValThrProLeuAlaHisHisHisThrAspTyr		201 LysglyHisSerGlnSerSerGlnPheSerSerAspGlnGluIleAlaHisLeuLeuPro 220	241 ThrProitysProAlaThrLeuLeuProThrAsnAlaSerValThrProSerGlyThrSer 260	281 ThrLeuIleSerThrValPheThrArgAlaAlaAlaThrLeuGlnAlaMetAlaThrThr 300	321 ProPheThrGlulleSerAsnLeuThrLeuAsnThrGlyAsnValTyrAsnProThrAla 340
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ulus adult male colon cDNA, RIKEN full-length enriched clone:9030619F12 product:weakly similar to NT2RM1001115 [Homo saplens], full insert sequence.
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Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M.,
Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A.,
D.R., Matsumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K.,
R., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Watahiki,M.,
Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J.,
Y., Muramataul,M., Inoue,Y., Kira,A. and Hayashizaki,Y.
Aregated sequence analysis (RISA) system--384-format
ing pipeline with 384 multicapillary sequencer
Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                          1., Alzawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Buracha, K., Hayaratu, N., Hiramoto, K., Hiracaka, T., Hirozane, T., Imotani, K., Ishi, Y., Itoh, M., Kagawa, I., Kabukawa, T., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., A.M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Salto, R., Salto, R., Saltoh, H., Sakai, C., Sakai, K., Sakazume, N., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T.,
LysTrpLeuLeulleGlySerLeuLeuPheGlyValLeuPheLeuVallleGly 400
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s of the mouse transcriptome based on functional annotation 70 full-length CDNAs

120, 563-573 (2002)
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                                              AAGTGCTTCTCATTGGGACCCTCTTTGTGGTGTTTTGTTTTCTGGTAATAGGT
                                                                                                                                               LeuLeuGlyArgIleLeuSerGluSerLeuArgArgLysArgTyrSerArgLeu
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iciency full-length cDNA cloning
izymol. 303, 19-44 (1999)
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.197 GTCCCAGGGTCTACAAGTTTTACA-------------CCCGTGGTTACACATCAG 1238
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|083 ACCCTGAAGCCTGAGCTTCTGTTG---ACCAGCATTTCAGTGACAGCTAAGACTTTGAAG
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                                             GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn
                                                                       LeuMet IlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys
                                                                                                                                                      TTGATGATCTTTGACACCCGGAAGACAGACAGACAGCCCAACTGCTACTTTTTCTGT
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DACPLKPAKGLVTYRLIRDFPLISANSSLQQLTQGBFILLDHSSPGATPGFRTPAGYP
KPTGLSWSDRSSLKSTAPLHLRKHIKADETSMQLPEEKSHSQSLQLPSELKMAHLLPK
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PGSTSFTPVVTHQAALTNTFQAHTDSKGILETMPFQGGSTLTSDPRHGKSSTSESSIT
NKTASWEDRRVSVGSASLNKGPKSQHGLSFEKWLLIGTLLCGVLFLVIGLVLLGRMLV
                                                                           Submitted (16-UL)-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                           cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

Please visit our web site for further details.

URL:http://genome.gsc.riken.jp/
URL:http://genom.gsc.riken.jp/
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'db_xref="G1:26329237"
'translation="MLPRGTSLAYSLLVISFLTPRSSAGONCLTKSLEDVVIDIOSSL
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  Takahashi, F., Takaku-Akahira, S.,
Toya, T., Yasunishi, A.,
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/note="unnamed protein product; putative
weakly similar to NT2RM1001115 PROTEIN [Homo sapiens
(SPTR|Q9NW60, evidence: PASTY, 58.3%ID, 96.7%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tissue type="colon"
clone_lib="RIKEN full-length enriched mouse
dev_stage="adult"
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Matches:
Conservative:
Mismatches:
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mol type="mRNA"
fstrain="C57BL/6J"
db_xref="FANTOM DB:9030619P12"
db_xref="taxon:10090"
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Sogabe, Y., Tagami, M., Tagawa, A.,
Takeda, Y., Tanaka, T., Tomaru, A.,
Muramatsu, M. and Hayashizaki, Y.
Direct Submission
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ACCESSION VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

TITLE JOURNAL COMMENT

LOCUS DEFINITION

RESULT 13 CV024215

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CF595929 753 bp mRNA linear EST 26-SEP-2003
AGENCOURT_15668985 NCI CGAP_St3 Homo sapiens cDNA clone
IMAGE:30703562 5', mRNA sequence.
                                                                                                                                                                   121 ATCCAGTCATCTTTCTAAGGGAATCAGAGGCAATGAGCCCATATATACTTCAACTCAA 180
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Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
National Cancer Institute / NIH
Bldg. 31 Rml0A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Arnold Schwartz, MD, PhD
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: NDCM251 row: d column: 03
High quality sequence stop: 540.
Location/Qualifiers
                                                                      61 CTAAGGCTGTCTGCTAGTCAGAATTGCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGAC
                                                                                                                                                                                                                                                              181 GAAGACTGCATTAATTCTTGCTGTTCAACAAAAAACATATCAGGGGACAAAGGCATGTAAC
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1 ATGTTCTTCGGGGGAGAAGGGAGCTTGACTTACACTTTGGTAATAATTTGCTTCCTGACA
                                            LeudrgLeuSeralaSerGlndsnCysLeuLysLysSerLeuGludspValValIleAsp
                                                                                                                                      41 IleGlnSerSerLeuSerLygGlyIleArgGlyAsnGluProValTyrThrSerThrGln
                                                                                                                                                                                                                                                                                                                                81 LeuMetIlePheAspThrArgLysThrAlaArgGlnProAsnCysTyrLeuPhePheCys
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                                                                                                                                                                                                                                   GluAspCysIleAsnSerCysCysSerThrLysAsnIleSerGlyAspLysAlaCysAsn
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1 (bases 1 to 753)

NIH-MCC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Ea (Dasses 1 to 623)

Rual, J.F., Hirozane-Kishikawa, T., Hao, T., Bertin, N., Li, S., Dricot, A., Li, N., Rosenberg, J., Lamesch, P., Vidalain, P.O., Clingingsmith, T.R., Hartley, J.L., Esposito, D., Cheo, D., Moore, T., Simmons, B., Sequerar, R., Bosak, S., Doucette-Stamm, L., Le Peuch, C., Vandenhaute, J., Cusick, M.E., Albala, J.S., Hill, D.E. and Vidal, M. Human ORFeome Version 1.1: a Platform for Reverse Proteomics Contact: Vidal M Marc Vidal Laboratory

Dana Farber Cancer Institute

1 Jimmy Fund Way Smith 858, BOSTON, MA 02115, USA

Tel: 617 632 5180

Fax: 617 632 5180

Fax: 617 632 5180

Fax: 617 632 5180

Cordial Marc Vidal@dfci.harvard.edu

ORF Sequence Tag (OST) of Gateway Entry construct. Each cloned ORF results from a PCR reaction using an MGC full-length cDNA as template DNA and ORF specific primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Vector: mixed; The ORFs were PCR amplified from the MGC (Mammalian Gene Collection) as of April 2004 and cloned by recombinational Gateway cloning into pDONR223 Donor vector. Reference: MGC (Mammalian Gene Collection) Program Team, Generation and Initial Analysis of more than 15,000 Full-Length Human and Mouse CDNA Sequences. PNAS, 2002, 99(26), 16899-16903"
                                                                                                                                                              EST 20-AUG-2004
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                                                                                                                                                          CV024215
1439 Full Length cDNA from the Mammalian Gene Collection Homo sapiens cDNA 5' similar to BC032998, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="maxNA"
/db_xref="taxon:9606"
/tissue type="mixed"
/clone_lib="Full Length cDNA from the Mammalian Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq primer: ACTGGCCGTCGTTTTACAACGTCGTGACTGGGAAAAC High quality sequence stop: 622 POLYA=No.
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BACKWARD: TAGATGTCCACATAGATCCCATT
Insert Length: 623 Std Error: 12
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FEATURES

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Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                      AK002644
Mus musculus adult male kidney cDNA, RIKEN full-length enriched library, clone:0610017A09 product:weakly similar to NT2RM1001115
PROTEIN [Homo sapiens], full insert sequence.
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 605 AATCAGTACCGCCTTCCATTTGAAAAATGGCTTCTTATCGGGTCCCTGCCTCTTTGGGTG 664
                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FANTOM Consortium. Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                  Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
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HTC; CAP trapper.
Mus musculus (house mouse)
Mus musculus
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         LysPheGlySerSerAspHisLeuGluLysLeuPheLysMetAspGluAlaSerAlaGln 194
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       crcrinctroaccarrocarcaccaccaccaccaccrecarrocaracccagcaccrac
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                                                                                                                                                                       Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-6045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
Please visit our web site (http://genome.gsc.riken.jp/) for further
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/clone_lib="RIKEN full-length enriched mouse cDNA library"
/dev_gtage="adult"
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/clone="0610017A09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/63"
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